

From qrp-request@Think.COM Wed Jan 12 08:58:56 1994  
Date: 12 Jan 94 13:25:37 GMT+0100  
From: Henk Hoekstra <H.Hoekstra@rc.rug.nl>  
Subject:

unsubscribe

From qrp-request@Think.COM Wed Jan 12 09:22:16 1994  
From: swm@homxb.att.com  
Date: Wed, 12 Jan 94 09:12 EST

Hello netters!

I just received from FAR circuits the boards for the NN1G Mk II receiver. Perhaps I have the cart before the horse, but where can I find the schematics/circuit description/operating manual for the rig? If someone has a copy, can they fax it to me?

Thanks in advance,  
es 72/73 de ND3P  
Scott McLellan

From qrp-request@Think.COM Wed Jan 19 14:11:27 1994  
Date: Wed, 19 Jan 94 13:18:18 CST  
From: cieslak@cgc9.eda.mke.ab.com (Brian Cieslak)  
Subject: re: Article in QST

Well I hope I can put this thread to rest....When I griped about QST last week I made the comment if anyone would be interested in a new magazine that would have micro processor based construction articles, programs and the like for ham radio that would satisfy the completeness issue of the thread.

The response from would be authors and readers on my email has encouraged me and Bob Berlyn, N1PWU, who has experience in the publishing field, to set the wheels in motion. We have a list of those who offered comments and volunteered (or should I say offered) to write and you will be contacted shortly.

The premier issue will hopefully be out early this summer, hopefully sooner, as there are a lot of pieces to the puzzle still being fit together. We will try to get copies of this issue in the hands of those on this net who may be interested in such a magazine for comments...Since there are a large number of homebrewers on this net we figure you guys would be a good sounding board and the toughest critics.

This Premier issue will be a major part of our marketing research so you now have the power to make or break the concept that we've all be griping about.

Now we

can get back to having fun on the net and Jim's,kr1s's ears can stop burning.  
Let hear only positive vibes for a while.

If you want more info, want to provide more comments, suggestions and encouragment  
or to be assured a copy of our premier issue let us know ..email direct

73,  
Brian AE9K es  
Bob N1PWU

From qrp-request@Think.COM Wed Jan 19 18:24:55 1994  
Date: Wed, 19 Jan 94 13:18:18 CST  
From: cieslak@cgc9.eda.mke.ab.com (Brian Cieslak)  
Subject: re: Article in QST

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Brian AE9K es  
Bob N1PWU

From qrp-request@Think.COM Tue Jan 11 09:28:31 1994

Date: Tue, 11 Jan 94 02:08:14 GMT  
From: jkearman@arrl.org (Jim Kearman)  
Subject: Articles in QST

Brad Mitchell comments on the lack of available source code for the "Uncle Albert's Keyer" article in a recent issue of QST.

Source code was not available for the CMOS Super Keyer or the Hershberger (W9GR) DSP filter either, so "Uncle Al" isn't breaking new ground here.

If the author chooses to retain the source code, we can't very well torture it out of him, can we? Should we reject a pretty neat project, just because a tiny number of readers want to be able to program their own ROMs? We don't think so.

May I point out that, while some readers may have access to semiconductor foundries, we don't publish dimensional data for MRF475 transistors? Think of a custom device as you would any exotic semiconductor, and it doesn't seem so bad. One of the most-popular keyers going is based on Curtis Microdevices custom integrated circuits. Many QRPers have installed them in their rigs, and I've never heard anyone complain that you can't make your own 8044ABM chip.

72/73

Jim Kearman, KR1S  
Assistant Technical Editor, QST

From parish@Think.COM Tue Jan 11 10:35:08 1994  
From: Edward Parish <parish@Think.COM>  
Date: Tue, 11 Jan 94 10:35:07 EST  
Subject: Articles in QST

Date: Tue, 11 Jan 94 02:08:14 GMT  
From: jkearman@arrl.org (Jim Kearman)

[....]

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Yeahbut. Does Motorola write an article in QST about how to use the MRF475? No, they write app notes to help sell their product. The point of the recent email I believe is that the authors are promoting their business or profiting through an article in QST. Authors of articles in the past usually had no connection to the suppliers of the material to construct the project. I don't think that the CMOS Super Keyer or DSP filter were precedents. I think that the precedents that you should be citing were the construction articles of the past couple of decades. These projects listed items such as PCB's that had the b+w layout printed in the article with the option to buy the prefabricated board. Correct me if I am wrong, but what I think these people want to see is the b+w code with the option to buy the prefabricated silicon.

Ed Parish WA2SCA

72/73

Jim Kearman, KR1S  
Assistant Technical Editor, QST

From qrp-request@Think.COM Tue Jan 11 11:25:03 1994  
Date: Tue, 11 Jan 1994 11:22:07 -0500  
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>  
Subject: Re: Articles in QST

> Brad Mitchell comments on the lack of available source  
> code for the "Uncle Albert's Keyer" article in a recent  
> issue of QST.  
>  
> Source code was not available for the CMOS Super Keyer

> or the Hershberger (W9GR) DSP filter either, so "Uncle  
> Al" isn't breaking new ground here.

Multiple wrongs don't make it ok. I Guess that I would be happy if it was  
at least called a  
kit review, as opposed to a regular article. Same as for the other "articles"  
too.

>  
> If the author chooses to retain the source code, we  
> can't very well torture it out of him, can we?

If he's a QRO guy, we could send him on a dxpedition with an xtal controlled  
qrp rig. :-)))

>Should  
> we reject a pretty neat project, just because a tiny  
> number of readers want to be able to program their own  
> ROMs? We don't think so.

There we go again picking on us minoritys again.  
I'll have to start the I'm a purist homebrewer that is so cheap I won't  
even buy code from a fellow ham club. :-)))

>  
> May I point out that, while some readers may have access  
> to semiconductor foundries, we don't publish dimensional  
> data for MRF475 transistors? Think of a custom device  
> as you would any exotic semiconductor, and it doesn't  
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> based on Curtis Microdevices custom integrated circuits.  
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> never heard anyone complain that you can't make your own  
> 8044ABM chip.

>  
> 72/73  
>  
> Jim Kearman, KR1S  
> Assistant Technical Editor, QST  
>

Ok, Ok, I know that Jim, but I guess I just don't know where to draw the line.  
For instance, there are some that are so pure as to want to make their own  
p.c. boards, instead of buying them, ie me. Then there are others that would  
rather  
wind a lifesaver than buy a torroid core. Your point is well intended and taken.  
I think that "controversial" subjects sometimes bring out good discussion.  
For instance, Howie makes a real good point about the fact that software is  
a very important part of what makes many radios work, and at least he seems

dissatisfied about the # of articles that promote that...

So what's the answer?

I don't know, but it's apparant that

you'll never make us all happy Jim,

no matter what you print in QST, but I'll always anxiously await it's arival.

73 es good luck!!

Brad WB8YGG

From qrp-request@Think.COM Tue Jan 11 11:25:27 1994

From: Bob\_Fairbairn-C12509@amail.mot.com

Date: 11 Jan 94 10:22:10 -0600

Subject: RE: Articles in QST

Software is an interesting beast. In the case of the articles in QST where the authors have chosen to keep their "property" secret. As a software engineer I like to keep control of my creations, but I would be nice

From qrp-request@Think.COM Tue Jan 18 19:13:13 1994

Date: Tue, 18 Jan 94 19:18:57 EST

From: bappleaga@isd.csc.com (Bob Applegate)

Subject: Re: Articles in QST

I think the purpose for publishing source code for a microcontroller project would be so that other people can learn something about how the device operates (by device, I mean the end product, not the microcontroller) and possibly to add some additional features. Since the code in the processor dictates what the device does, then it basically means that any article without source code is a black box that can't be expanded or modified. Is this the purpose of articles in QST?

Now let's address the topic of "not being compensated" for software work. I'm a software engineer, so I think I have a right to comment on this topic. Why is there a difference between the amount of time/work involved in a software effort versus a hardware effort? If I spend 500 hours developing a project that uses off the shelf components (no uprocessors), why do I deserve any less "compensation" than someone who spends 5 hours on hardware and 495 hours on software? We both put in the same amount of time, and we both get paid the same amount per page when published. I fail to see the difference.

Processor based projects should be EXACTLY like hardware projects... everything needed to build it should be part of the article or available for next to nothing (such as dialing into a BBS to download PC board patterns, etc). If the author wants to make a few bucks on the side, then some of the parts can be made available for \$\$\$, but the builder should not be required to buy components from the author of the article.

Just my two cents worth...

72,

Bob wa2zzx

From qrp-request@Think.COM Wed Jan 19 10:18:41 1994

Date: Wed, 19 Jan 94 09:18:30 CST

From: tardis@atd.mke.ab.com (Bob Citkowski)

Subject: Re: Articles in QST

hi,

continuing on this drawn out thread..... the february 73 magazine has an "article", not

a review of a kit, on an ascii to cw project. provides the schematic, parts list, long article on what's going on, but, no listing of the code for the eprom program that

the micro uses. in the parts list the "kit" provider for \$27 will sell you the micro

and eeprom with the required code burned along with the source code and software tools

to program/modify the code yourself, of course one needs to have a eprom eraser/programmer

available to do this. this seems to be a recurring "problem"(?) with the projects that

are being published according to the thread on this list. but, from the average ham i

run across, if he even wants to build something, which most don't, they don't have the

technical understanding of micro programming and debugging to accomplish the projects

beyond the basic circuit fabrication ability. let's face it people, most of the ham

population doesn't have an EE degree. it's a hobby, and most of the hobbists work in

offices, or manufacturing, or, heck, they're retired, and they don't have the lab resources

available to accomplish hardware/software projects. the small slice of the ham population

that is represented by this list distribution is not representative of the general ham

population by any stretch of the imagination. now can we finish this thread and move on?

Just my two cents worth... 8-0

de bob -- n9jak

From qrp-request@Think.COM Wed Jan 19 12:05:27 1994

Date: Wed, 19 Jan 94 7:05:16 HST  
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>  
Subject: RE: ARTICLES IN QST

I'm getting tired of saying this but I guess it need to be said every few months. Bob, et al, I have subscribed to this mail list only to read about the wonderful world of QRP. These ongoing posts about non-QRP related items are boring and costly; this is not USENET but a very private email list with a very narrow scope. Don't you realize that some folks on here have to pay a fee for each email they receive? You are costing them money that they didn't intend having to spend by posting articles outside the purpose of the net (so the ``tough - they don't have to read it'' attitude doesn't apply here). Please, stick to the topic of the net. Thanks guys (and gals, too!)

Jeff NH6IL (ex WA6QIJ)

From qrp-request@Think.COM Wed Jan 19 12:19:52 1994  
From: jerry@tr2.com  
Subject: Re: Articles in QST  
Date: Wed, 19 Jan 1994 08:58:12 +0000 (GMT)

N9JAK writes:

> [...] the average ham i  
> run across, if he even wants to build something, which most don't, they don't have the  
> technical understanding of micro programming and debugging to accomplish the projects  
> beyond the basic circuit fabrication ability.

\*\*\* Here I have to disagree. Yes, its true that most hams are not interested in building. But those who \_are\_ ( and after all, it's the builders that such articles are written for ) should be well capable of learning the simple coding techniques required for something like a code keyer. It just ain't rocket science. Of course, my view may be jaded, since I've been banging out embedded firmware for a living for the past 13 years, but I've known several ham experimenter types who've done their own little microcontroller applications, and it seems to be a relatively accessible area for someone who's already into electronics.

Also, I would submit that the \_software\_ is the ``fun part'' of such projects. Don't know about you guys, but I find wiring up computer circuitry deadly dull. Never one wire, always 8, or 16, or 32 or.... But when you get into the source code, things liven up. Want a new feature? Add a couple of lines of code for it! Take out something you don't like? Ditto! Customize the buttons for the contest on Saturday? Noooo problem! Stick your own call into the thing for



automatic ID? Ditto! Simple software is a tinkerer's dream.

That project where the author offered source and tools for \$27, That's pretty good; I have nothing against that. It's the ones where they sell you just a programmed part that I don't like. Not that there's anything immoral about it, it's just not much fun. Here you are, going to all the trouble to get all these parts together, build a case, stuff the board; this pre-programmed part comes in the mail, and \*bingo\* you're an appliance operator again!

- Jerry

--

```
*****
* Jerry Kaidor          jerry@tr2.com, jkaidor@synoptics.com      *
*                      KF6VB                                     *
*****
```

From qrp-request@Think.COM Wed Jan 19 13:40:00 1994

Date: Wed, 19 Jan 94 7:05:16 HST

From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>

Subject: RE: ARTICLES IN QST

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Jeff NH6IL (ex WA6QIJ)

From qrp-request@Think.COM Wed Jan 19 14:29:48 1994

From: jerry@tr2.com

Subject: Re: Articles in QST

Date: Wed, 19 Jan 1994 08:58:12 +0000 (GMT)

N9JAK writes:

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* Jerry Kaidor      jerry@tr2.com, jkaidor@synoptics.com      *
*                  KF6VB                                       *
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From qrp-request@Think.COM Wed Jan 19 14:53:35 1994  
Subject: Re: ARTICLES IN QST  
Date: Wed, 19 Jan 94 14:52:27 EST  
From: "John F. Woods" <jfw@ksr.com>

> I'm getting tired of saying this but I guess it need to be said every  
> few months. Bob, et al, I have subscribed to this mail list only to  
> read about the wonderful world of QRP.

OK, does anyone have any low=power mods to the software on the ... OUCH!  
Stop throwing those keyers!

72 & 73, John, WB7EEL

From qrp-request@Think.COM Wed Jan 19 16:44:28 1994  
Date: Wed, 19 Jan 94 7:05:16 HST  
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>  
Subject: RE: ARTICLES IN QST

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From qrp-request@Think.COM Wed Jan 19 17:08:40 1994  
From: jerry@tr2.com  
Subject: Re: Articles in QST  
Date: Wed, 19 Jan 1994 08:58:12 +0000 (GMT)

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*                  KF6VB                                     *
*****
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From qrp-request@Think.COM Wed Jan 19 18:46:28 1994  
Subject: Re: ARTICLES IN QST  
Date: Wed, 19 Jan 94 14:52:27 EST  
From: "John F. Woods" <jfw@ksr.com>

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72 & 73, John, WB7EEL

From qrp-request@Think.COM Thu Jan 20 11:28:30 1994  
From: swm@homxb.att.com  
Date: Thu, 20 Jan 94 11:18 EST

Hello QRP netters!

For those who responded to my request for a parts list and schematic for the NN1G transceiver, my eternal thanks.

I now am accumulating the parts necessary to build the NN1G Mk II transceiver. Most of the parts are easy to come by. But the 10.7 MHz IF transformers are not specified in the parts list. Does anybody have a part number? Any ideas on turn ratios and/or nominal inductance? There are several types that are available from different suppliers but I don't know which should be used (my guess is that the choice is not that critical).

Any ideas?

72/73 de ND3P  
Scott McLellan

From qrp-request@Think.COM Fri Jan 21 10:17:29 1994  
Date: Fri, 21 Jan 94 15:06:41 GMT  
From: jkearman@arrl.org (Jim Kearman)  
Subject: Call for Articles

QST is always interested in considering articles on the topics of homebrewing equipment, or QRP operating. Before suggesting a topic, please review QST for the past two years or so, and try to suggest a topic we haven't covered.

Some possible topics:

QRP Antenna Tuners  
Alternative Power Sources  
Pictures/articles about people having fun with QRP  
How your club set up a club project or kit

Please contact me with topics you'd like to write about. If I like the idea, I'll send you an Author's Guide and we can get started.

Thanks and 72/73,

Jim Kearman, KR1S  
Asst Technical Editor

jkearman@arrl.org  
203-666-1541 ext 279  
203-665-7531 (FAX)  
203-667-2568 (home)

From qrp-request@Think.COM Fri Jan 21 11:00:30 1994

Date: Fri, 21 Jan 94 10:36:55 EST (1536Z)  
From: kevin der kinderen <mtimpn@baileys-emh2.army.mil>

UNSUBSCRIBE

I hate to send this to the general audience but my request to unsubscribe sent to qrp-request@think.com seems to have failed. I sent another request just before this. Any help pulling my name from the list will be appreciated.

Kevin, kj4qf  
mtimpn@baileys-emh2.army.mil

From qrp-request@Think.COM Tue Jan 11 19:23:19 1994  
Date: Tue, 11 Jan 1994 19:21:57 -0500  
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>  
Subject: capacitor designations

well guys, I as well as others have learned the hard way that for instance 470 on a capacitor can mean 47 or 470 pf!! I kinda think that there should almost be a note of that in the handbook! That's why I'm looking to build a low value cap meter. This is described in September 1986 QST. This will aid very much in the construction of my qrp rigs. It's a pretty simple circuit the only part I'm having a hard time finding is the horizontal scale 50 micro amp meter. (Anybody know a good source?).

Once again, don't believe what you read about caps and designations! They can be verbatim the way they are written on the cap.. for instance 100 can mean 100 pf , or by the handbooks designation which is 100 menas 10 pf!! I know this for a fact because I have personally lped a couple of local hams debug their circuits only to find that was the problem. Can you imagine trying to get an xtal oscillator to run using 470 pf instead of 47 pf? It don't work!! I myself have not been bitten by this problem, but I sense it comming soon, so I want the meter done before hand ... 73 all and have a good one..  
Brad WB8YGG

From qrp-request@Think.COM Wed Jan 12 08:06:02 1994  
From: bal@ccd.harris.com (Bruce Lifter)  
Subject: Re: capacitor designations  
Date: Wed, 12 Jan 1994 08:10:41 -0500 (EST)

Brad Mitchell writes:

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> for instance 470 on a capacitor can mean 47 or 470 pf!! I kinda  
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> They can be verbatim the way they are written on the cap.. for instance  
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> by this problem, but I sense it comming soon, so I want the meter done  
> before hand ... 73 all and have a good one..  
> Brad WB8YGG  
>

This almost caught me on a 40 meter NN1G MARK II from Dan's kits. Two  
of the ceramic caps that were supposed to be 47 pf were marked 470.  
Having just obtained a meter from RS (~\$49 closeout) that measures  
capacitance, I was spot checking most of the values when I ran across  
them. At first I thought I was reading the meter wrong. After measuring  
a couple of other known pf values, I was convinced they were 470 pf.  
Given my only experience with determining capacitor values was with my  
understanding of the handbook, the meter saved further frustration.

73, Bruce

--

Bruce Lifter  
Harris Corporation  
Controls Division

MS: R5-202  
email: blifter@ccd.harris.com  
Amateur Radio Packet: KR4AQ@N5AUV.#MLB.FL.USA.NA

-----

From qrp-request@Think.COM Tue Jan 11 15:09:49 1994  
Date: Tue, 11 Jan 94 10:09:35 HST  
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>  
Subject: CAPACITORS

Hi Gang,

I've been on your side of the Pacific for the last three weeks - I don't  
know how you folks can stand that cold weather (currently here in Hawaii  
at 0945 the temp is 75...).

Anyway, I wanted to build a couple of QRP xmtrs while on vacation -  
found some simple circuits at the local library, but was I was dismayed  
at what I saw: the books in which contained the schematics didn't give  
any unit of measurement for the required capacitors - only numerical  
values were provided but no uF or pF units.

I checked my 1972 ARRL Handbook (my only copy) and saw that the Handbook does the same - only numerical values, EXCEPT for each schematic there is a footnote stating ``... whole number capacitor values are in pF, decimal values are in uF...' - this makes sense after a moments thought.

So my question is this: Is the Handbook's convention standard practice? i.e., if the unit of measurement is not stated, we should assume whole number values are in pF and decimal values are in uF?

Next question (related to the first): My junkbox (parts from junked TV sets) contains dozens and dozens of capacitors with again no pF or uF markings (especially ceramic disk caps); does the above convention also apply?

Question 3: Some older tubular caps have the unit 'mfd' marked on them; by today's units I would interpret that as 'millifarad' which seems way too big for RF applications. Did manufacturers at one time use: mfd = micro-farad?

Finally, a complaint: Why do authors, when RF chokes are called for, only provide a company's name and stock number rather than giving the actual inductance value? Doesn't anyone wind their own RF chokes? Am I a nut to want to do so? (I greatly dislike buying something if I can instead make it myself.)

Thanks in advance.

Jeff NH6IL

From qrp-request@Think.COM Tue Jan 11 16:16:45 1994  
Subject: Re: CAPACITORS  
Date: Tue, 11 Jan 94 16:15:54 EST  
From: "John F. Woods" <jfw@ksr.com>

> I checked my 1972 ARRL Handbook (my only copy) and saw that the Handbook  
> does the same - only numerical values, EXCEPT for each schematic there is  
> a footnote stating ``... whole number capacitor values are in pF, decimal  
> values are in uF...' - this makes sense after a moments thought.

> So my question is this: Is the Handbook's convention standard practice?  
> i.e., if the unit of measurement is not stated, we should assume whole  
> number values are in pF and decimal values are in uF?

Yes.

> Next question (related to the first): My junkbox (parts from junked TV  
> sets) contains dozens and dozens of capacitors with again no pF or uF  
> markings (especially ceramic disk caps); does the above convention also  
> apply?

Yes, though some of the ceramics will be coded (e.g. "103" means  $10 \times 10^3$  pF, not 103 pF). (The way I remember that is that 100 and 101 have the same meaning.)



> Question 3: Some older tubular caps have the unit 'mfd' marked on them;  
> by today's units I would interpret that as 'millifarad' which seems way  
> too big for RF applications. Did manufacturers at one time use: mfd = micro-  
> farad?

Yes, and frequently mmfd for micro-micro-farad (now pF).

> Finally, a complaint: Why do authors, when RF chokes are called for,  
> only provide a company's name and stock number rather than giving the  
> actual inductance value? Doesn't anyone wind their own RF chokes? Am  
> I a nut to want to do so? (I greatly dislike buying something if I  
> can instead make it myself.)

I don't think I've seen this for RF circuits, but I've seen it done a lot in power supply circuits, and some of the same reasons might apply: for power supply circuits, where the chokes are subjected to large stresses of current, voltage, and sharp transients in each, the actual value of the choke becomes less important than the details of manufacture; i.e. one manufacturer's 100uH choke works, another's 100uH choke just detonates on the board. For RF, construction details would change parasitic capacitances and self-resonant frequencies, again meaning that one 10uH choke would work and another 10uH choke would fail.

From qrp-request@Think.COM Tue Jan 11 18:51:30 1994  
Date: Tue, 11 Jan 94 13:51:24 HST  
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>  
Subject: RE: CAPACITORS

Gang,

Thanksso much for all the replies concerning capacitor values; now I know why some of my projects don't work they way they should.....

I am supriised my Handbook (the 1972 edition) didn't mention the convention concerning ceramic disk caps: XYZ = XY\*10^Z pF. There is a fairly detailed appendix concerning component values, but no mention of this.

Jeff NH6IL (ye olde WA6QIJ)

From qrp-request@Think.COM Thu Jan 13 09:14:19 1994  
From: mvjif@mvubr.att.com  
Date: Thu, 13 Jan 94 09:01 EST  
Subject: Century 21

QRPers

I rebuilt the PTO (VFO) on my Century 21 rig but there is some backlash when tuning.

The frequency will not stay where it is set, but wants to change (return) slightly.

Any ideas ?

W1AW/QRP... Please listen for the QRP Club of New England  
(QRP-NE) Sunday from approx. ~ 1800Z to 2000Z  
on the usual QRP CW freqs, from Newington CT,  
ARRL Hdq, using the call W1AW/QRP.

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com

From qrp-request@Think.COM Thu Jan 20 16:22:03 1994  
Date: Thu, 20 Jan 94 14:22:46 -0700  
From: tjf@beta.lanl.gov (Tom J Farish)  
Subject: Compact loop

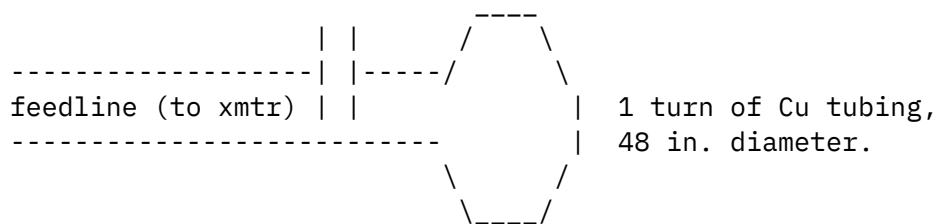
Hi All,

I got lots of requests to post more info about the  
homebrew loop antenna I built last fall. Here  
are the details. I used 1/2 inch copper pipe bent  
into a circle 48" in diameter. My simple calculations  
show that this loop has an inductive reactance of  
235 ohms at 14.05 Mhz. Thus to resonate at this  
frequency,  $X_c=235$  which leads to a capacitance of  
about 48 pF. I had a bunch of doorknob capacitors  
rated to 20-30KV, so I put several in series. Three  
180pF's gave me 60pF. Too high, I said, but I had a  
tuner. Well, in my backyard, this seemed to give me  
less than 1.5 SWR from 14.025 to 14.075, with  
almost 1:1 at 14.05! Now 60 pF gives a capacitive  
reactance of 185 ohms which is 50 less than the  
235 ohms of inductive reactance! Just a coincidence  
it is 50 ohms....? Well, when I set it up over my brick  
patio, I get a different resonance! I think this is because  
the loop is only about 6 feet off the ground (also, I  
watered the lawn that day, it was a Sunday, etc..... ;^ )

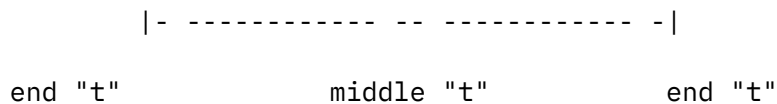
I used doorknob caps as the voltages on such a loop can  
easily get to the kilovolt range, so I am told.

Here is a drawing courtesy of William Graham - VE6UUG,  
who posted to me to ask a question:

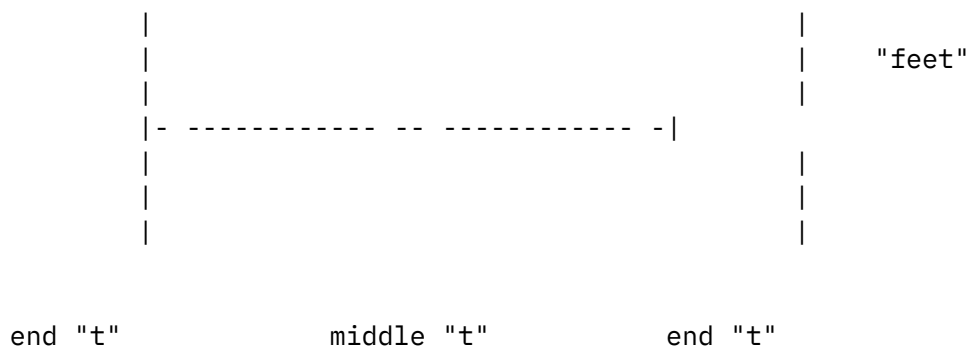
25 to 60pF,  
20 KV



The feedline is coax. I attached the caps and SO-239 to the loop with hose clamps! The PVC frame is built from short sections of 3/4" thick wall tubing and "t" sections. Top view looks like this:



The "t" are not threaded, but held together by friction to allow easy take-down. I have a 5-foot length that I put into the middle "t" as the mast. An identical section below forms the 'feet' with the addition of 4 more 2-foot lengths stuck into the end "t" 's instead of the copper pipe. Top view looks like this:



That's all there is to it! By the way, thin-walled tubing is too flimsy for the 1/2-inch pipe. You might try 1/4 inch.

So far, it has worked like a champ with my MFJ 9020. I'll be testing with some real power if I can get it up a bit higher.....beware of high voltages on this loop!

Tom

KJ5LT

From qrp-request@Think.COM Tue Jan 11 09:46:56 1994  
Date: Mon, 10 Jan 94 06:40:45 PST  
From: Gary\_Thorburn\_at\_Notes-Gate@sceng.UB.com  
Subject: Cosmonaut Contact TODAY !

Just learned a couple minutes ago that my son's school, which did a SAREX sked a while ago, is supposed to be talking to a cosmonaut today (do they still make cosmonauts?) at 12:15pm EST. The school is in Maynard, MA.

Anyway, I have no further information, but I'd like to try to listen in from my car on lunch hour.

I expect it will be a 2m simplex contact, perhaps split. Does anyone have any suggestions about what exact frequencies might be used?

Incidentally, both my son and I got our tickets largely due to having our interest sparked by the school's SAREX activity in March 1992.

/\*\*\*  
Gary W. Thorburn gthorbur@ub.com KB1AIF  
\*\*\*/

From qrp-request@Think.COM Tue Jan 18 22:03:28 1994  
Date: Tue, 18 Jan 94 22:02:11 EST  
From: "Henry T. Rand Jr." (FSAC-AAD) <rrand@PICA.ARMY.MIL>  
Subject: CZEBRIT 94 Contest

I received the following information on the contest from Gus Taylor,G8PG, today.

CZEBRIT 94 is a new world-wide QRP event run jointly by the OK and G QRP Clubss

It is open to all QRP operators, with sections for OK/OM stations, UK stations, other EU stations and stations outside EU. The leader in each section will receive one year of G QRP Club free membership and a certificate. Second and third will receive certificates.

Rules:

1. Dates/Times: From 1600 gmt 25 Feb-2359 gmt 27 Feb 1994.
2. Frequencies: 3560, 7030, 14060, 21060, 28060 khz, all +/- 5 khz.

3. Power/emission: Power must not exceed 5w rf output, using CW only.  
Stations unable to measure rf output, use half their dc input.

4. Scoring:

a. Contacts with own country do not count.

b. EU stations:

- (1). Each contact with OK, OM or UK stations count as 2 points.
- (2). Each contact with another EU country counts as 1 point.
- (3). Each contact with station outside EU counts as 3 points.
- (4). UK stations may not contact any other UK stations.

c. Stations outside EU:

- (1). Each contact with OK, OM station counts as 5 points.
- (2). Each contact with UK station counts as 5 points.
- (3). Each contact with any other EU station counts as 3 points.

d. Multipliers:

- (1). EU: Any station contacting 5 or more DXCC countries multiply point score by 2.
- (2). Outside EU: Any station contacting 2 or more countries in EU multiply score by 2.

e. Scoring:

- (1). Total points per band added together X multiplier(work stations only once per band).

5. Exchange: RST, Serial number, / , power(watts)

Example: 579001/5 or 579003/01 (01 signifies 100mw, 5 signifies 5w)

6. Logs: Send log sheets and summary to the following addresses:

a:EU, except UK and Ireland:

OK QRP C  
C/O Petr Doudera, OK1CZ  
ul baterie 1  
16200 Praha 6  
Czech Republic

b:Outside EU and UK and Ireland:

G QRP C  
C/O A. D. Taylor, G8PG  
37 Pickerill Road  
Greasby  
Merseyside L49 3ND  
England

7. Awards: As defined in the introduction.

8. Disputes: The decision of the organisers is final.

Comments: The contest falls on the same weekend as the CQ WW 160m SSB contest and the weekend between the ARRL DX CW and SSB contests. This is a busy time of the contest season.

72 & GL,

Randy Rand AA2UxD

From qrp-request@Think.COM Sun Jan 16 18:01:13 1994

Date: Sun, 16 Jan 94 15:00:09 PST

From: dh@deneb.csustan.edu (Doug Hendricks)

Subject: Dayton ARCI Rooms

If you are interested in staying with the ARCI group at Dayton, here is the info. We will be staying at the Day's Inn South, which is actually in Miamisburg, where they make Drake gear, and is 25 miles from the Convention.

The person in charge of the ARCI rooms is Myron Koyle, of Canton, Ohio. To reserve a room, you need to send him a check for \$70 made out to Day's Inn South, and tell him how many nights you want the room. The room will cost \$70, and they don't care how many you put in the room. Give Myron a call at 216-477-5717 for his address and the availability of rooms. I just got off the phone (Sunday at 3:00 PM, PST) and he has rooms left. Please don't send me email with questions, because I have just told you all that I know. See you in Dayton!!!

72,

Doug, KI6DS

From qrp-request@Think.COM Mon Jan 10 18:31:20 1994  
Date: Mon, 10 Jan 1994 17:29:00 +0000  
From: "david (d.e.) baker" <debaker@bnr.ca>  
Subject: re:MFJ-1786 Hi-Q Loop

In message "MFJ-1786 Hi-Q Loop", you write:

>I saw an ad in one of the radio mags over here in the UK about the  
>MFJ-1786 Hi-Q Loop aerial (sorry antanna). I was wondering if anyone had  
>tried this type of aerial out for QRP work, and if so how successful they  
>found them.

>

>Thanks, 73 Martin

>--

```
>+----- Email -----+----- Radio -----+
>| qrp@chalford.demon.co.uk      | g4dul@g4dul.ampr.org [44.131.5.145] |
>| coburn@gec-mi-at.co.uk       | NTS BBS network G4DUL @ GB7KHW   |
>+=====^=====+
```

Martin,

I have used the MFJ loop, and it does indeed work. It will outperform most any dipole that is not at least a half wavelength up in the air. I just got an AEA ISOLLOOP which is about the same thing as the MFJ, and it usually gives me 2 to 4 S units over my 40 meter dipole (on any freq. between 10-30, of course). For comparison, my 40 meter dipole is attic mounted, about 15 feet above ground level, in a U shape. The loop is also horizontal, at 20ft, still inside the attic... However, before I mounted the loop, I used it mounted on a 5 ft pole, right in the room with me, and it still beat or equaled the dipole's gain. The major problem with a loop is tuning. They are slow and difficult to tune, due to their high Q nature. Bandwidth is also small due to the Q, typically 10 to 100KHz depending on freq. This will also help eliminate any TVI, especially at QRP levels. :)

Homebrew QRP loops should prove to be very functional, the only problem will be that it would be very difficult to make one with a remote tuner. As easy project might be a 40Meter QRP loop. Using loop antenna construction guidelines, it would be simple to create a loop with a fixed capacitor, but then it would only operate on a fixed frequency and at low power only. The other big problem with loops is that they create very high voltages on the loop during transmit. Commercial loops like MFJ, AEA, or AMA's are designed for higher power, and thus require HUGE tuning capacitors with high voltage ratings.

Bottom line: if you can't mount an antenna (dipole) up at the ideal height, a loop will probably beat it. I would still recommend putting

up a long wire or something similiar just for scanning. It is somewhat tiring to try to retune the loop as you scan the band.

Hope this helps. Check the November 1993 issue of QST or one of the ARRL antenna handbooks if you want some more background info.

```
-----  
| David E. Baker | Internet: debaker@bnr.ca (Richardson, TX, USA) |  
| IP: 47.122.65.7 | UnixID: crchh7b0 | Bell-Northern Research, Inc. |  
| Callsign: AB5PI | Packet: AB5PI@N5AUX.#DFW.TX.USA.NA | Smile! ;- ) |  
| My opinions do not necessarily reflect the opinions of my employer |  
|-----|
```

From qrp-request@Think.COM Tue Jan 11 09:29:02 1994  
Date: Tue, 11 Jan 94 07:29:42 -0700  
From: tjf@beta.lanl.gov (Tom J Farish)  
Subject: re:MFJ-1786 Hi-Q Loop

Hi...I built my own version of the MFJ and AEA units and posted my results in rec.radio.antenna a while back. The unit was made of 3/4" copper tubing bent into a 43" diameter loop. 50 pF of HIGH voltage doorknob capacitors gave me a 2:1 VSWR range covering almost 14.025 to 14.075. With a tuner (and a cap change) I worked the Novice portion of 15m with no problem. I mounted the antenna on a PVC tubing frame about 10 feet off the ground and worked Olympia Washington (1836 miles) on one watt with my MFJ 9020 QRP rig. I had most of the parts on hand so it cost me about \$10. The reason the MFJ and AEA units cost so much is the stepper-motor-driven BIG air-variable HV capacitor. It takes me about 1 minute to change out the doorknob cap on my loop, so I didn't care about being able to tune it faster. Also, I use it only on the code section of the bands, so I don't need a wide tuning range.

Good luck! I find building antennas lots of fun...and MUCH cheaper than buying.

Tom  
KJ5LT

From qrp-request@Think.COM Tue Jan 11 16:20:00 1994  
Date: Tue, 11 Jan 94 14:19:50 MST  
From: Tom Poindexter <tpoind@advtech.uswest.com>  
Subject: re:MFJ-1786 Hi-Q Loop

Tom,

Would you happen to have a drawing of your loop? I've seen several variations of where the feedpoint is, and where to locate the cap. If you just copied a published design, a pointer to that would be fine instead of a drawing. You also mention using a 50pF cap on 20m. What voltage rating? What size



cap for 15m?

Thanks,  
Tom

Tom Poindexter      tpoint@advtech.uswest.com or tpoindex@nyx.cs.du.edu  
U S WEST Advanced Technologies, Boulder, Colorado  
"I hate it when that happens"

From qrp-request@Think.COM Mon Jan 10 20:57:03 1994  
Date: 9 Jan 1994 20:00:23 -0800  
From: "CPSMTP01" <CPSMTP01@cpqm.saic.com>  
Subject: Gateway Prob, Please re-send

Mail\*Link(r) SMTP                      RE>QRP:Hamfest crystals?  
> From: randy@cyphyn.radnet.com (Randy)  
> Subject: Re: QRP:Hamfest crystals?  
> To: rclayton@umd5.umd.edu (Rodney Clayton)  
> Date: Sun, 9 Jan 1994 13:37:13 -0500 (EST)  
> Cc: qrp@Think.COM (qrp @think.com)  
> In-Reply-To: <199401091717.MAA28381@yorick.umd.edu> from "Rodney Clayton" at  
Jan 9, 94 12:17:11 pm  
> X-Mailer: ELM [version 2.4 PL21]  
> Content-Type: text  
>  
> >  
> > What should I expect to pay for 7MHz crystals at a hamfest?  
> > Is the load capacitance marked on the crystal?  
> > Thank's Rod KA3BHY  
> >  
> The cost will vary...anywhere between 50c and \$2.00  
>

I've seen quite a few rocks at various frequencies going for \$.25 to  
\$7.00. It also depends on the 'fest...

--

|                                           |               |                 |
|-------------------------------------------|---------------|-----------------|
| Mesmerized by a decade of hate,           | ! AMATEUR =   | N80FS           |
| Flowers and remorse,                      | ! ARMY MARS = | AAN5HJT         |
| Fading vision lost in time,               | ! CB =        | THE NEON KNIGHT |
| Tragedy on course!!! - Frontline Assembly | ! HACKER =    | TH3 N30N KN16Ht |

----- RFC822 Header Follows -----

Received: by cpqm.saic.com with SMTP; 9 Jan 1994 20:00:19 -0800  
Received: by mail.think.com; Sun, 9 Jan 94 21:56:20 -0500  
Return-Path: <fmsystem!andrews@wariat.org>  
Received: from Think.COM by mail.think.com; Sun, 9 Jan 94 21:56:16 -0500  
Received: from wariat.org by Early-Bird.Think.COM; Sun, 9 Jan 94 21:56:12 EST  
Received: from fmsystem by wariat.org with uucp(/\==/\ Smail3.1.28.1 #28.5) id

<m0pJCmv-00030jC@wariat.org>;  
Sun, 9 Jan 94 21:55 EST for Think.COM!qrp  
Received: by fms.com (Smail3.1.28.1 #1)  
id m0pJCK9-0001CTC; Sun, 9 Jan 94 21:52 EST  
Message-Id: <m0pJCK9-0001CTC@fms.com>  
From: andrews@fms.com (Andrew Sargent N80FS)  
Subject: Re: QRP:Hamfest crystals?  
To: randy@cyphyn.radnet.com (Randy)  
Date: Sun, 9 Jan 1994 21:52:37 -0500 (EST)  
Cc: qrp@Think.COM (QRP)  
In-Reply-To: <m0pJ50j-0000XfC@cyphyn.radnet.com> from "Randy" at Jan 9, 94  
01:37:13 pm  
Reply-To: andrews@telemax.com  
X-Mailer: ELM [version 2.4 PL21]  
Mime-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 8bit  
Content-Length: 953

From qrp-request@Think.COM Tue Jan 11 17:29:30 1994  
Date: 9 Jan 1994 20:00:23 -0800  
From: "CPSMTP01" <CPSMTP01@cpqm.saic.com>  
Subject: Gateway Prob, Please re-send

Mail\*Link(r) SMTP RE>QRP:Hamfest crystals?  
> From: randy@cyphyn.radnet.com (Randy)  
> Subject: Re: QRP:Hamfest crystals?  
> To: rclayton@umd5.umd.edu (Rodney Clayton)  
> Date: Sun, 9 Jan 1994 13:37:13 -0500 (EST)  
> Cc: qrp@Think.COM (qrp @think.com)  
> In-Reply-To: <199401091717.MAA28381@yorick.umd.edu> from "Rodney Clayton" at  
Jan 9, 94 12:17:11 pm  
> X-Mailer: ELM [version 2.4 PL21]  
> Content-Type: text  
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Received: by cpqm.saic.com with SMTP;9 Jan 1994 20:00:19 -0800  
Received: by mail.think.com; Sun, 9 Jan 94 21:56:20 -0500  
Return-Path: <fmsystm!andrews@wariat.org>  
Received: from Think.COM by mail.think.com; Sun, 9 Jan 94 21:56:16 -0500  
Received: from wariat.org by Early-Bird.Think.COM; Sun, 9 Jan 94 21:56:12 EST  
Received: from fmsystm by wariat.org with uucp(/\==/\ Smail3.1.28.1 #28.5) id  
<m0pJCmv-00030jC@wariat.org>;  
Sun, 9 Jan 94 21:55 EST for Think.COM!qrp  
Received: by fms.com (Smail3.1.28.1 #1)  
id m0pJCK9-0001CTC; Sun, 9 Jan 94 21:52 EST  
Message-Id: <m0pJCK9-0001CTC@fms.com>  
From: andrews@fms.com (Andrew Sargent N80FS)  
Subject: Re: QRP:Hamfest crystals?  
To: randy@cyphyn.radnet.com (Randy)  
Date: Sun, 9 Jan 1994 21:52:37 -0500 (EST)  
Cc: qrp@Think.COM (QRP)  
In-Reply-To: <m0pJ50j-0000XfC@cyphyn.radnet.com> from "Randy" at Jan 9, 94  
01:37:13 pm  
Reply-To: andrews@telemax.com  
X-Mailer: ELM [version 2.4 PL21]  
Mime-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 8bit  
Content-Length: 953

From qrp-request@Think.COM Tue Jan 11 23:45:58 1994  
Date: 9 Jan 1994 20:00:23 -0800  
From: "CPSMTP01" <CPSMTP01@cpqm.saic.com>  
Subject: Gateway Prob, Please re-send

Mail\*Link(r) SMTP                   RE>QRP:Hamfest crystals?  
> From: randy@cyphyn.radnet.com (Randy)  
> Subject: Re: QRP:Hamfest crystals?  
> To: rclayton@umd5.umd.edu (Rodney Clayton)

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> Cc: qrp@Think.COM (qrp @think.com)  
> In-Reply-To: <199401091717.MAA28381@yorick.umd.edu> from "Rodney Clayton" at  
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Received: by mail.think.com; Sun, 9 Jan 94 21:56:20 -0500

Return-Path: <fmsystem!andrews@wariat.org>

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Received: from wariat.org by Early-Bird.Think.COM; Sun, 9 Jan 94 21:56:12 EST

Received: from fmsystem by wariat.org with uucp(/\==/\ Smail3.1.28.1 #28.5) id  
<m0pJcmv-00030jC@wariat.org>;

Sun, 9 Jan 94 21:55 EST for Think.COM!qrp

Received: by fms.com (Smail3.1.28.1 #1)

id m0pJck9-0001CTC; Sun, 9 Jan 94 21:52 EST

Message-Id: <m0pJck9-0001CTC@fms.com>

From: andrews@fms.com (Andrew Sargent N80FS)

Subject: Re: QRP:Hamfest crystals?

To: randy@cyphyn.radnet.com (Randy)

Date: Sun, 9 Jan 1994 21:52:37 -0500 (EST)

Cc: qrp@Think.COM (QRP)

In-Reply-To: <m0pJ50j-0000XfC@cyphyn.radnet.com> from "Randy" at Jan 9, 94  
01:37:13 pm

Reply-To: andrews@telemax.com

X-Mailer: ELM [version 2.4 PL21]

Mime-Version: 1.0

Content-Type: text/plain; charset=US-ASCII

Content-Transfer-Encoding: 8bit

Content-Length: 953

From qrp-request@Think.COM Wed Jan 12 02:31:20 1994  
From: randy@cyphyn.radnet.com (Randy)  
Subject: Gateway Prob, Please re-send (fwd)  
Date: Wed, 12 Jan 1994 02:28:50 -0500 (EST)

sorry....but SOMbodys mail box is roasted...I include all so you'll know!

Forwarded message:

> From Think.COM!qrp-request Wed Jan 12 00:39:45 1994  
> Message-Id: <m0pJQwc-00041kC@wariat.org>  
> Date: 9 Jan 1994 20:00:23 -0800  
> From: "CPSMTP01" <CPSMTP01@cpqm.saic.com>  
> Subject: Gateway Prob, Please re-send  
> To: "Randy" <randy@cyphyn.radnet.com>  
> Cc: "QRP" <qrp@Think.COM>  
> Content-Type: text  
> Sender: andrews@Think.COM  
>  
> Mail\*Link(r) SMTP RE>QRP:Hamfest crystals?  
> > From: randy@cyphyn.radnet.com (Randy)  
> > Subject: Re: QRP:Hamfest crystals?  
> > To: rclayton@umd5.umd.edu (Rodney Clayton)  
> > Date: Sun, 9 Jan 1994 13:37:13 -0500 (EST)  
> > Cc: qrp@Think.COM (qrp @think.com)  
> > In-Reply-To: <199401091717.MAA28381@yorick.umd.edu> from "Rodney Clayton" at  
> Jan 9, 94 12:17:11 pm  
> > X-Mailer: ELM [version 2.4 PL21]  
> > Content-Type: text  
> >  
> > >  
> > > What should I expect to pay for 7MHz crystals at a hamfest?  
> > > Is the load capacitance marked on the crystal?  
> > > Thank's Rod KA3BHY  
> > >  
> > The cost will vary...anywhere between 50c and \$2.00  
> >  
> I've seen quite a few rocks at various frequencies going for \$.25 to  
> \$7.00. It also depends on the 'fest...  
> --  
> Mesmerized by a decade of hate, ! AMATEUR = N80FS

```

> Flowers and remorse,                ! ARMY MARS = AAN5HJT
> Fading vision lost in time,          ! CB =          THE NEON KNIGHT
> Tragedy on course!!! - Frontline Assembly ! HACKER =    TH3 N30N KN16Ht
>
> ----- RFC822 Header Follows -----
> Received: by cpqm.saic.com with SMTP;9 Jan 1994 20:00:19 -0800
> Received: by mail.think.com; Sun, 9 Jan 94 21:56:20 -0500
> Return-Path: <fmsystem!andrews@wariat.org>
> Received: from Think.COM by mail.think.com; Sun, 9 Jan 94 21:56:16 -0500
> Received: from wariat.org by Early-Bird.Think.COM; Sun, 9 Jan 94 21:56:12 EST
> Received: from fmsystem by wariat.org with uucp(/\==/\ Smail3.1.28.1 #28.5) id
> <m0pJCmv-00030jC@wariat.org>;
> Sun, 9 Jan 94 21:55 EST for Think.COM!qrp
> Received: by fms.com (Smail3.1.28.1 #1)
> id m0pJCK9-0001CTC; Sun, 9 Jan 94 21:52 EST
> Message-Id: <m0pJCK9-0001CTC@fms.com>
> From: andrews@fms.com (Andrew Sargent N80FS)
> Subject: Re: QRP:Hamfest crystals?
> To: randy@cyphyn.radnet.com (Randy)
> Date: Sun, 9 Jan 1994 21:52:37 -0500 (EST)
> Cc: qrp@Think.COM (QRP)
> In-Reply-To: <m0pJ50j-0000XfC@cyphyn.radnet.com> from "Randy" at Jan 9, 94
> 01:37:13 pm
> Reply-To: andrews@telemax.com
> X-Mailer: ELM [version 2.4 PL21]
> Mime-Version: 1.0
> Content-Type: text/plain; charset=US-ASCII
> Content-Transfer-Encoding: 8bit
> Content-Length: 953
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Randy KA1UNW                If you get a shock while
                             servicing your equipment,        "Works for me!"
randy@192.153.4.200         DON'T JUMP!                        -Pete Keyes
                             You might break an expensive tube!

```

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From qrp-request@Think.COM Tue Jan 11 14:42:22 1994
Date: Tue, 11 Jan 94 13:33:11 EST
From: epacyna@auratek.com (Edward Pacyna)

```

Subject: Ham Radio Magazine

I spent a lot of time indoors last week due to getting over 20" of snow. I went through some old issues of Ham Radio Magazine (70's and 80's).

I forgot how good this magazine really was in terms of technical articles. Lots of creative ideas, construction and state of the art articles. In fact, most of the material is still better than whats being published today. Really miss this kind of stuff.

Point is, I often see stacks of back issues available at flea markets. They usually sell for a buck or two a year. Buy them if your interested in top notch construction / technical articles.

Note: The 70's and early 80's Ham Radio magazine was much better than their late 80's and early 90's issues.

73

Ed W1AAZ

From qrp-request@Think.COM Sat Jan 15 04:45:55 1994  
Date: Sat, 15 Jan 94 09:38:15 GMT  
From: dick@kanga.demon.co.uk (Dick Pascoe)  
Subject: Re: HI & HH Vacation

Hi all,

I am visiting Dom Republic (HI) and hopefully Haiti (HH) too from May 11th - 26th, Hoping to get licence and take HW8 or Argo 515 or similar. Plan to be active QRP CW on normal frequ, Any offers of ideas, suggestions welcomed as this is first visit to Carribean. All comments welcome.

Any ARCI / GQRP members on the island?

72 de Dick.

--

Richard Pascoe

From qrp-request@Think.COM Thu Jan 20 16:27:14 1994  
From: g-taylor4@tamu.edu  
Date: 20 Jan 94 14:41:01 CDT  
Subject: Re: HI & HH Vacation / 8P Trip

> I am visiting Dom Republic (HI) and hopefully Haiti (HH) too  
> from May 11th - 26th, Hoping to get licence and take HW8 or  
> Argo 515 or similar. Plan to be active QRP CW on normal frequ,  
> Any offers of ideas, suggestions welcomed as this is first

> visit to Carribean. All comments welcome.

Dick's post inspired me to (finally) write up experiences from my trip last October to 8P (Barbados) for what use it may be to others.

Wound up going to Barbados after some late-breaking changes in travel plans which, other than some scrambling for a hotel room, didn't pose any major problems. Fortunately, Barbados licensing procedures don't require advance application (in fact, I think it must be done in person). I was 8P9BD about 15 minutes after walking through the door of the Communications Authority. Amazingly enough the checked baggage with accessories and antenna components had arrived with the plane and everything went right through customs. I was able to use an AC supply because line voltage and sockets (at least at our hotel) were U.S. compatible. Unfortunately, because of the aforementioned scrambling for a hotel, the antenna situation was less than optimum. Although the room was on top floor, maybe 40 feet up, there was no way to run a wire in the open. Although a variety of configurations were tried (glad I brought the transmatch), evidently a noticable signal was never developed.

In fact, it was a lot like operating QRP from the home qth... you know...better results answering than calling CQs, etc. Also became a believer in the saying that a DX callsign gets you a 10db increase in signal. With a full-bore 5 watts, I was getting about the same signal reports as at the home qth. About S7 from the super-stations with monobanders at 75 ft. etc, S5 from tribander at 35 ft crowd and, when we were able to connect, S3 from the stations with dipoles. Figure what was gained by the callsign was lost by the antenna.

Some general observations - appeared to be a two hop limit (all 20 meter operation) for contacts, signal just couldn't seem to make that third hop. Definitely different propagation patterns from there. PZ1DY, who had been running about S6 back in Texas, came blasting through like he was next door (which come to think of it, he was, and over salt water at that).

Still had a great time, although I didn't draw big pile-ups that made for a little more relaxed operation, which I think the XYL appreciated. And, hearing I was the first- ever 8P for some made it worthwhile anyway. Aside from ham radio, Barbados itself was interesting to visit.

If I had it to do over again wouldn't change much. I would certainly work on enhancing the antenna situation. Also, would try to borrow a two-meter handheld to take so I could talk to the locals. I did take a small assortment of tools, soldering iron, wire, string, tape, etc. which turned out to be nice to have in working on the antenna. And, hopefully, some day I will get a chance to try it again!

72, Greg KD4HZ





identification.

I guess things that are too good to be true really are too good to be true. The local surplus supplier sells the unidentified transformers for \$.10 each. Dan sells the 10.7 mhz IF transformers for \$1.00 each and Ed W1AAZ tells me that Mouser has them for \$.79.

It appears that there is no easy way to identify these. It seems to be the consensus that the markings are from a supplier and without knowing who the supplier is, then it's off to the test bench. I spent a hour or so digging in data hand books before giving up. I went as far as tearing one apart to see how it's made. The wires are so small and gunked up, it is near impossible to determine the winding ratios. I will probably grab a hand full to throw in my junk box while they are still available, just in case I later decide to play with them on the test bench.

At this point, I don't think the unidentified transformers are worth messing with. If anybody else out there does, I will gladly send you a small hand full, free, provided you tell me the results of your investigation. :)

73, Bruce

--

Bruce Lifter

Harris Corporation

Controls Division

MS: R5-202

email: blifter@ccd.harris.com

Amateur Radio Packet: KR4AQ@N5AUV.#MLB.FL.USA.NA

-----  
From qrp-request@Think.COM Mon Jan 10 15:38:41 1994

Date: Mon, 10 Jan 1994 14:43:56 -0500

From: Brad Mitchell <bmitchel@CBA.Kodak.COM>

Subject: Re: IF Transformer Identification Help

It appears that there is no easy way to identify these. It seems to be the consensus that the markings are from a supplier and without knowing who the supplier is, then it's off to the test bench. I spent a hour or so digging in data hand books before giving up. I went as far as tearing one apart to see how it's made. The wires are so small and gunked up, it is near impossible to determine the winding ratios. I will probably grab a hand full to throw in my junk box while they are still available, just in case I later decide to play with them on the test bench.

-----

Well, it seems to me, that if you had a real accurate ohm meter, and the primary and secondary are using the same gauge wire, you might be able to approximate the turns ratio that way. You would need a precision ohmmeter specifically for low ohmage measurments, like the kind used for tracking inter-layer shorts on boards.

73 Brad WB8YGG

From qrp-request@Think.COM Wed Jan 12 21:39:32 1994

From: randy@cyphyn.radnet.com (Randy)

Subject: Improved power supply

Date: Wed, 12 Jan 1994 21:36:46 -0500 (EST)

Finding a need for regulated 100vdc, I added a zener diode to the '150volt' power supply I posted some time ago.

The extra diode is to prevent any voltages (like form a charged cap or a mis-wired, experimental somthing) from getting back to the zener.

This also uses the full current capability of the transformer

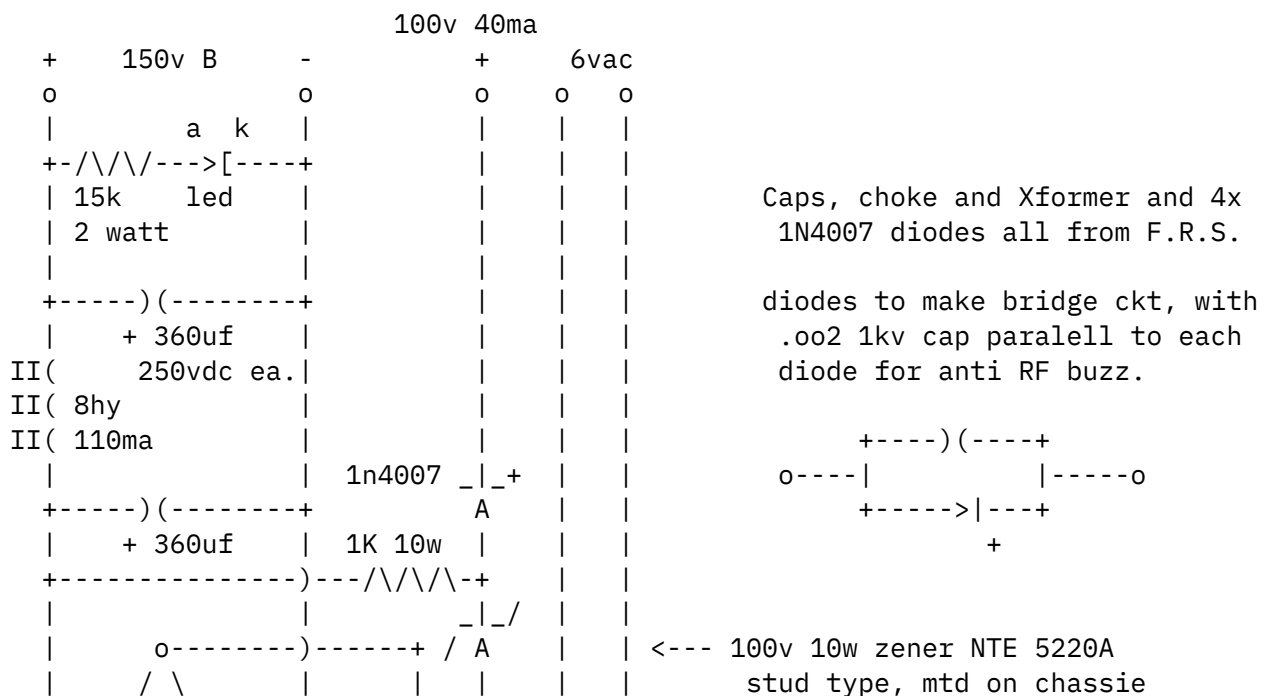
FRS Transformer is # 115-2045 pg 12 WS-93 cat

Choke, 8HY is # L3/SG15 pg 14 WS-93

Caps are on page 11

sorry for forgetting this before

Power supply for small tube ckts 150vdc 100ma, 100v 40ma reg & 6.3vac 6a.



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+--o/+  -\o----+   | ###   |   |
  \      /         |         |   |
   \ /   1kv bridge |         |   |
    o     &         < 50     |   |
    |    .002uFs    > ohm    |   |
    |               <10 W    |   |
    |    115vac .2a |         |6.3|
+-----+         +----+
=====
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|               on off               ( | =
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|               o/ o-----+-----+-----+-----+-----+-----+-----+
|               \_l= 117vac

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--
Randy KA1UNW           If you get a shock while
                      servicing your equipment,           "Works for me!"
randy@192.153.4.200    DON'T JUMP!                         -Pete Keyes
                      You might break an expensive tube!

```

```

From qrp-request@Think.COM  Mon Jan 10 13:26:27 1994
From: Scott Wood <swood@vela.acs.oakland.edu>
Subject: Inductance measurement?
Date: Mon, 10 Jan 1994 13:26:37 -0500 (EST)

```

What is the easiest and least expensive way to measure inductance?  
Do I have to run out and get a DIP meter?

swood

```

--
If you receive this signature, please return it to it's rightful owner:
swood@vela.acs.oakland.edu      swood@argo.acs.oakland.edu
swood@unix.secs.oakland.edu     swood@terminator.rs.itd.umich.edu

```

```

From qrp-request@Think.COM  Mon Jan 10 15:50:06 1994
Date: Mon, 10 Jan 94 15:38:50 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: Inductance measurement?

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>
>What is the easiest and least expensive way to measure inductance?
>Do I have to run out and get a DIP meter?
>
>swood
>

```

No, although it would be a nice and simple way. If accuracy is important you should also measure the frequency at which the dip for the L/C circuit occurs (e.g. frequency counter or a general coverage receiver w/ digital dial).

You can also build a L/C tuned oscillator with a know amount of C. Install a L, measure the frequency (see above) and calculate the value of L.

In either case the formula is  $L = (25330.3) / (F^2 \times C)$

73

Ed W1AAZ

From qrp-request@Think.COM Mon Jan 10 09:25:30 1994  
From: Bob\_Fairbairn-C12509@amail.mot.com  
Date: 10 Jan 94 08:23:17 -0600  
Subject: KB6NQ version of Super CMOS II

Good Morning all;

It looks like there are two suppliers of the Super CMOS II keyer. For \$25 you can get one from KB6NQ. Does anyone have the address to order from KB6NQ? I have the Idiom Press Address, but being cheap.....

72 KF90A. Check in the mail for a NorCal 40!

From qrp-request@Think.COM Mon Jan 10 10:09:12 1994  
From: Tony Lyon <tonyl@amcu-tx.sps.mot.com>  
Subject: Kenwood TS-430 @QRP levels  
Date: Mon, 10 Jan 94 9:09:00 CST

Greetings QRP'ers,  
I have a question for you guys. I have a Kenwood TS-430 whic I purchased recently from my dad. I have been running it at QRP levels (i.e.  $\leq 5$  w). Yesterday, a strange thing happened. After about 10 minutes, the power level dropped to  $< 0.5$  watts. But, as soon as I tweaked the carrier knob, the power came back up. My dad owned the radio for about 6 years, and never used it on CW. Therefore, I rotated the Carrier knob back and forth several times, to loosen any potential grit that could have accumulated on the wiper of the potentiometer, but no change at all. The problem is consistent, which should make it easy to debug.

My non-QRP ham friends tell me to just leave the carrier at high levels, and just forget about it. But, I do like working at QRP levels.....

Any ideas??

Is it common to run an HF rig with the power turned down to QRP levels??

Any ideas/suggestions would be greatly accepted!!

Regards,

Tony Lyon (KB5ZYA/AA)

P.S. I am a new ham (~4 mos.)

From qrp-request@Think.COM Mon Jan 10 16:18:09 1994

Date: Mon, 10 Jan 94 15:24:51 CST

From: cieslak@cgc9.eda.mke.ab.com (Brian Cieslak)

Subject: re: keyers and Uncle ALbert

Brad,

I tend to agree with you...It is interesting that a majority of construction articles that appear in QST and the handbook these days require you to buy the key component from the author, usually a programmed part. There was a time that QST ran construction articles that used parts that could only be found in the author's junk box...in the 70's they went a little more generic so a majority of the parts in a project could be picked up at R.S.. I think QST should require that authors make all the information required to build a project available for free to its readers who pay \$30 a year for the privilege of being a member and make the purchase of pre-programmed parts an option instead of a requirement. Otherwise, as you suggested, the authors should be paying for an ad to sell their products.

One of the classic examples is the Super Cmos II keyer...It was featured in an article in QST and is in the HANdbook...but you can't build one unless you buy a pre-programmed part from the author or his representatives. Why isn't the source code in the handbook? I feel if the article was published in QST or any other magazine it becomes the property of the readers who purchased that magazine.

So there! 73, Brian AE9K

From qrp-request@Think.COM Mon Jan 10 15:35:51 1994

Date: Mon, 10 Jan 1994 12:16:59 -0500

From: Brad Mitchell <bmitchel@CBA.Kodak.COM>

Subject: keyers and Uncle Albert's Advertisement in QST



con: Curtis will probably still be making 8044ABMs next year.  
con: ...

pro: Coders deserve to be compensated for their work!

I sorta come down on the "it's just a kit" side, but rather than getting exercised about it, what I'd really like to do is create some useful uC gadget for publication in QST and make a point of making code available (perhaps a companion QEX article about software design?). A disadvantage, however, is that the usual kitting places might not carry it (since \*I\* don't particularly want to get into the kit business) since the availability of the code would make instant duplication easy.

Maybe what's really needed is a series of articles on designing new software for the CMOS-II Keyer and the other black-box uC kits that have been published.

From qrp-request@Think.COM Mon Jan 10 18:38:46 1994  
Date: Mon, 10 Jan 1994 15:36:04 -0800  
From: btoback@netcom.com (Bruce Toback)  
Subject: Re: keyers and Uncle Alberts Advertisement in QST

>> Well, I know this isn't really qrp, but keyers seem to be a hot topic lately.  
>> Well, It seems to me that the recent article in QST about Uncle Alberts Keyer  
>> was nice, but it really should have been in the paid adds part of the  
>> magazine.  
>> The reason I say this is the quote that was in the notes part that the code  
>> for  
>> the controller is "unavailable". Well this means that basically it's a kit,  
>> and kit alone. I have nothing against making money, but this belongs in the  
>> adds part of the magazine. Am I missing something?

>pro: Coders deserve to be compensated for their work!

>I sorta come down on the "it's just a kit" side, but rather than getting  
>exercised about it, what I'd really like to do is create some useful uC gadget  
>for publication in QST and make a point of making code available (perhaps a  
>companion QEX article about software design?). A disadvantage, however, is  
>that the usual kitting places might not carry it (since \*I\* don't particularly  
>want to get into the kit business) since the availability of the code would  
>make instant duplication easy.

I've been thinking about this issue, since I've been planning a construction article that will use a number of programmed parts -- not all with code, but a few. Obviously, there's a substantial benefit to publishing the source code, or at least the important parts of it. Just as obviously, it's hard work writing the code, and I'd like to get something more than '\$50/page for it. The work that goes into the keyer articles is tiny compared to the work that goes into the keyers.



One solution is to publish the code, but retain copyright to it. That means that readers can make copies for their personal use, but can't sell them. Those few readers who have access to the hardware necessary to program the parts can buy the parts themselves, and the rest can buy programmed parts from a supplier. All who are interested get the benefit of understanding (or at least perusing) the software that gives the project its character.

By the way, the big distributors like Hamilton (or whoever they are these days) will sell programmed parts if you guarantee them a minimum order. That way, you don't have to get into the kit production business. Most uC projects have few non-junk-box parts \_except\_ for the uC, so just making the programmed chip available would probably statisfy most people. In fact, I suspect that very few people would want to take the trouble to compile/assemble the source code, figure out how to link it, and then generate a ROM image with the proper relocation. They'd just buy the programmed parts.

-- Bruce Toback  
Internet: btoback@netcom.com  
Packet: kn6mn@kc7y.az.usa.na

From qrp-request@Think.COM Tue Jan 11 00:20:27 1994  
Date: Tue, 11 Jan 1994 00:20:19 -0500 (EST)  
From: howie cahn <howi@world.std.com>  
Subject: Keyers, technical articles, and software

I too am upset about the recent articles in QST, and other ham magazines, that seem to me to be little more than licenses for authors to sell kits for their projects. The reason for publishing a technical article is to educate; there's no justification for one that doesn't fully explain the project and at least provide a good start toward duplicating it. I recently wrote an article describing the hardware and software to interface a PC to a Ramsey 2 Meter transceiver (\_Communications Quarterly\_, Fall '93). The program was written in Visual Basic. I tried to go through much of its design philosophy and I provided sample code. While it wasn't feasible to include the entire program listings, I said that if anyone was interested, I'd either post the full source to Internet, CompuServe, etc., or for a nominal charge, send them a disk. I felt that you have no business publishing an article if you won't release the source code. On the other hand, this still leaves me free to sell an executable version of the program, with enhancements and support, if I choose.

There's a larger issue here -- that a significant and growing portion of communications technology consists of software

-- but this hasn't been recognized by the ham magazines. In a typical station there's the microcontroller code in the transceiver's ROM, packet/TNC control programs, logging software, external radio control programs, etc. Have you ever seen articles on how to do any of these? The little that is given is usually state-of-the-art circa 1970. The last copy of the Handbook I have has two pages about software; a brief description of a few programming languages. If you take away the programming component of projects like the Uncle Albert or Super CMOS II keyers, you're basically just left with a soldering exercise. I'd like to see articles which describe both the hardware and software, and in enough detail to learn something.

72/73...

howie, wb2cpu  
howi@world.std.com

From qrp-request@Think.COM Tue Jan 11 05:14:45 1994  
From: jjw@seastar.org (John Welch)  
Date: Mon Jan 10 08:37:21 1994

Newsgroups: qrp  
Path: jjw  
From: jjw@seastar.org (John Welch)  
Subject: Re: MFJ-1786 Hi-Q Loop  
Reply-To: jjw@seastar.org (John Welch)  
Organization: Welch Research.  
Date: Mon, 10 Jan 1994 14:37:17 GMT  
Message-ID: <CJF4M6.1FF@seastar.org>  
Followup-To: qrp  
References: <1179727@chalford.demon.co.uk>  
Lines: 23

As quoted from <1179727@chalford.demon.co.uk> by seastar!nshore!  
usenet.INS.CWRU.Edu!chalford.demon.co.uk!qrp (Martin Coburn):

> I saw an ad in one of the radio mags over here in the UK about the  
> MFJ-1786 Hi-Q Loop aerial (sorry antenna). I was wondering if anyone had  
> tried this type of aerial out for QRP work, and if so how successful they  
> found them.  
>  
> Thanks, 73 Martin

I'm not certain I know this antenna, but if it's similar to the AEA Iso-Loop, it isn't even suitable for semi-serious QRO let

alone QRP. With the IsoLopp and 100 watts, we were mostly inaudible in the noise. Flipping the antenna switch to a non-resonant dipole (through a tuner) and we were about S7. We also couldn't hear very well. (Yes, we tuned it properly. It just sux as an antenna, and it radiates a little too much for an expensive dummy load.)

Just on general principles, I would stay away from any shortened loop antenna \*UNLESS\* your only other option was to stay off the air. My \$0.02 worth, your opinions are worth as much as mine too ; -)

--

John Welch, N9JZW

From qrp-request@Think.COM Tue Jan 11 14:10:25 1994  
Date: Tue, 11 Jan 94 13:10:12 CST  
From: dadams@cherry.cray.com (David Adams)  
Subject: Re: Keyers, technical articles, and software

howie cahn <howi@world.std.com> wrote:

>The program was written in  
>Visual Basic. I tried to go through much of its design philosophy and  
>I provided sample code. While it wasn't feasible to include the entire  
>program listings,

From my point of view, I would much rather see a little bit of pseudo code than the actual program. (Leaving out any routines not immediately relevant to the project, or information that is well documented elsewhere.) I would be likely to choose to write in some other language, maybe even on an alternative hardware platform. Psuedo code, or algorithm notes, would get me going faster than actual code in a language I am not used to.

This approach would leave the author free to sell his own implimentation as he chose.

Sourdough and Ham AA0PV

--David C. Adams           internet: dadams@cray.com  
Statistician               uunet:       uunet!cray!dadams  
Cray Research Inc.       packet:       kg0io@tcman.#msp.mn.usa.noam  
9 months of good sleding, 3 months of bad sleding.

--member: Minnesotans for Global Warming.

From qrp-request@Think.COM Fri Jan 14 19:57:36 1994  
Date: Fri, 14 Jan 94 19:20 EST

From: <MAILER-DAEMON@cyphyn.radnet.com>  
Subject: mail failed, returning to sender

|----- Failed addresses follow: -----|  
bobh@hpesoc1.cup.hp.com ... transport smtp: connect: Error 125  
|----- Message text follows: -----|

Received: by cyphyn.radnet.com (Smail3.1.28.1 #5)

id m0pKFg4-0001TpC; Wed, 12 Jan 94 19:12 EST

Message-Id: <m0pKFg4-0001TpC@cyphyn.radnet.com>

From: randy (Randy)

Subject: Re: Power For QRP

To: bobh@hpesoc1.cup.hp.com

Date: Wed, 12 Jan 1994 19:12:44 -0500 (EST)

In-Reply-To: <9401122308.AA02642@hpesoc1.cup.hp.com> from "Bob Headrick" at Jan 12, 94 03:08:26 pm

X-Mailer: ELM [version 2.4 PL21]

Content-Type: text

Content-Length: 1073

>

> The NorCAL radio is about 15mA in receive, 2-300mA in transmit. Batteries  
> last a \*long\* time. I use 8 AA rechargable alkalines that fit nicely  
> inside the case - but would be a little hard to charge with the solar  
> setup. A 2AH gel cell would probably last a week of normal operating,  
> even if you forget to turn it off. .

>

OH my! 15ma for rx? oh! Thats a LOT different then! and 200-300ma TX  
ah...then Norcal is in the 2 watt region...( I assumed maybe 4.5 watts)

Speaking of QRP...just 3 min ago, on 3699kc, I was hailed by a QRP out of  
Florida...X ruff copy, and he was using a keyer and kept flubbing things  
with it...but it looks like KC4GKY (something...maybe /AA or some such)  
so got to this machine to do a call search on him...and here you were!

I'm in Connecticut, by the way.

--

Randy KA1UNW

If you get a shock while  
servicing your equipment,  
DON'T JUMP!

randy@192.153.4.200

You might break an expensive tube!

"Works for me!"

-Pete Keyes

From qrp-request@Think.COM Mon Jan 10 01:05:06 1994

Date: Sun, 09 Jan 94 19:23:17 GMT

From: qrp@chalford.demon.co.uk (Martin Coburn)

Subject: MFJ-1786 Hi-Q Loop

I saw an ad in one of the radio mags over here in the UK about the

MFJ-1786 Hi-Q Loop aerial (sorry antenna). I was wondering if anyone had tried this type of aerial out for QRP work, and if so how successful they found them.

Thanks, 73 Martin

--

```
+----- Email -----+----- Radio -----+
| qrp@chalford.demon.co.uk      | g4dul@g4dul.ampr.org [44.131.5.145] |
| coburn@gec-mi-at.co.uk       | NTS BBS network G4DUL @ GB7KHW    |
+=====^=====+
```

From qrp-request@Think.COM Sat Jan 15 18:04:08 1994

From: randy@cyphyn.radnet.com (Randy)

Subject: Mini-tube TX ( 6AU8 )

Date: Sat, 15 Jan 1994 18:01:21 -0500 (EST)

ANOTHER XMIT! ( will go with 6GH8 RX set and 150V power supply)

6AU8 ( 6AW8 6BA8 etc, 9DX based tubes) Transmitter up to 700mw

```

      3 +-----+---)(---+      :      9 +-----+-----+
          _|_ | .01 | :      _|_ |
+-----+-----... ) |C101: 7 ...-----+ _|_ )
_|_ | 2 --- ) +---)(---+-----... 8 | _____.o1) L2
[ ] < 1| ) L1 | : | --- | | )
|X1 >100k | ) \_|_C1 : < 6| | \_|_C2 ) +-----o out
### < | | --- : >56k +-)(---)(+ --- ) ( L3
| c o |-(---| \ : < |.o1 |.o1| | \ ) (
### J o |.01 ### : | < ### | ### | +-----+
S1 o |b | :### > 100 | | |
a| ### | : < ohms | | | ###
o-----+-----)-----+
key | | : | |
o---+---)(---+ +-----+---/\//\//\+---o 150v 40ma
| .o1 : / | 2200 2 | +
### /\ fil : +--->|-----+ 2 watts| o -
4| |5 : | / 100v | _|.o1uf |
o o : ### 10 w zener --- ###
6.3v .7a | |
###shield ###

```

pf = uuf = mmf all caps => 250v

Resistors 1/4 w unless specified & any %

.o1 = 103

C101 22 - 100pf...use smallest value that gives max out put...will need to be 22pf for 3rd Over-tone xtals/ freqs 14mc and up

C1=C2= 50 uuf min (at max mesh) but not over 400uuf  
200-400 uuf jobs good for 160-80-40 mtrs only

I used 55uuf ones from Fair Radio Sales....screw-driver adj.

$L_1=L_2=$  (can be Digikey coils)

C= half mesh value of C1 C2

F= Mid band freq, Mc's

$$\frac{25330}{(F \times F) \times C} = \text{UH}$$

round off to nearest std value  
that Digikey has.

L3 ... aprox 6:1 ratio, turns...experimental try n see may be needed

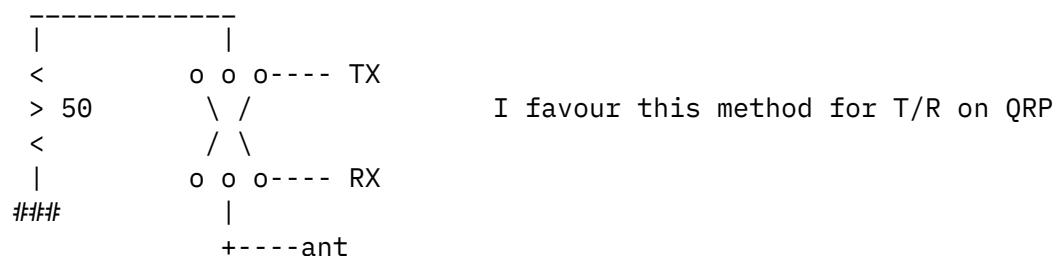
Note...on higher bands, osc may chirp so, use S1 to keep osc on & just key the final.

S1

$$\begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$$

a c b can be toggle or slide-switch

S2 ( not shown) DPDT...to switch ANT from RX to TX and switch B+ to transmitter if desired...or cross wire it to put dummy load where ant is not... ( pair of 100 ohm 1 watt in paralell)



Zener..In my model , I used a VR-105, later tried a stack of 9 volt 1 watt  
zeners ( by passed with .01uf 250v).

Cost of all those 9's is close same as a sud-mtd 10watt 100v.

If using the 'improved 150v supply' you can omit 2200 ohm and zener, and run a 2nd B+ wire, to the 100v...of which it can be the switched one for T/R if you choose to switch the B+...( keep B+ ON, on the RX set tho).

The reason for being vague about C1 C2 is that everyone has their own sources for caps... so for me to rock-solid-specify a uuf, may make it impossible for some to build this.

For those who have caps or get caps of 2 different values, just calculate the uh for each.....need NOT have to have both caps same.  
...but put the smaller value cap on the oscillator (triode ) part.

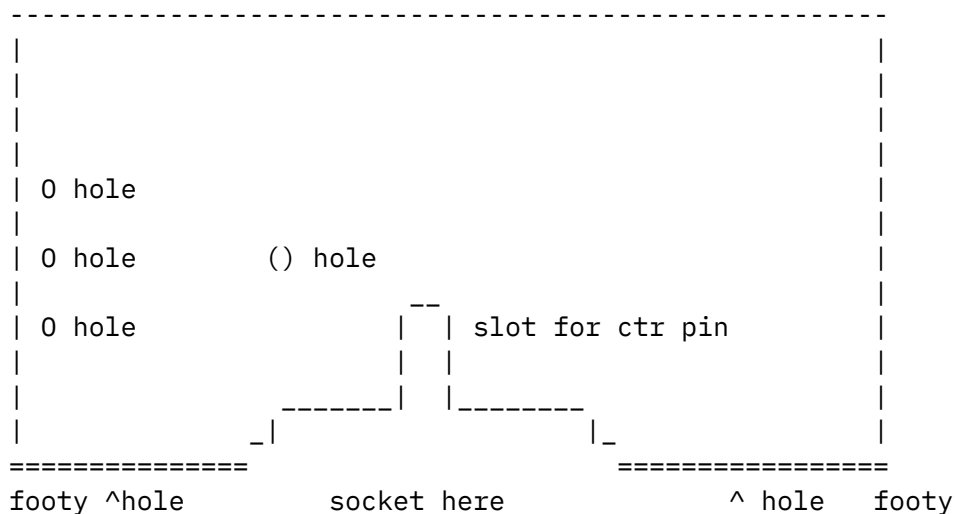
This is NOT a wood base set! A 7" chassie (aluminum) is best, but those wanting to build small, can squeeze it all in to a 5 x 3 Radio Shack box.

Pentode section of this rig may try to self osc...so have L1 and L2 mtd on 90 deg. angle to each other....or as I did, put a cross-socket shield so it passes between pins 1 & 9 and OK if it grounds pin 4 or 5...unless same supply runs Receiver, and you want fil. line to be balanced.  
( then slip sleeving over 4 & 5 to prevent shortage)

The central pin that many 9 pin sockets have can be used as solder-on-support for the shield....cut a slot in the shield so it fits up in there.

The shield is to be cut carefully so it snug-fits the socket and has 'feet' with holes to allow # 4-40 nuts/bolts fastening to the chassie.  
I used a metal coffee can lid for this....cut to fit, using sissors!  
( I got a cheap pair for \$3.00 at Walgreens)

Magnified view of cross-socket- shield: U cut to fit



```

      3 +---+---)(--+
      _|_ | .01 |
+---+---... ) |C101: 9 +-----+---+
_|_ | 2 --- ) +---)(--+---... 7 ...-----+ _|_ )
[ ] < 1| )L1 | : | --- 8 | ---.01) L2
|X1 >100k | ) \ | C1 : < 6| | \ | C2 ) +-----o out

```



```

##### < | | --- : >56k +-) (-+ -) (+ --- ) ( L3
| c o | -) (--- | \ : < |.01 |.01| | \ ) (
##### J o |.01 ##### : | < ##### | ##### | +-----+
S1 o |b | :##### > 100 | | |
a| ##### | : < ohms | | | #####
o-----+-----)-----+ | | |
key | | : | | |
o---+---) (-+ +-----+-----+---/\//\//\---o 150v 40ma
|.01 : / | 2200 2 | +
##### /\ fil : +-->|-----+ 2 watts| o -
4| |5 : | / 100v | |.01uf |
o o : ##### 10 w zener --- #####
6.3v .7a | |
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```

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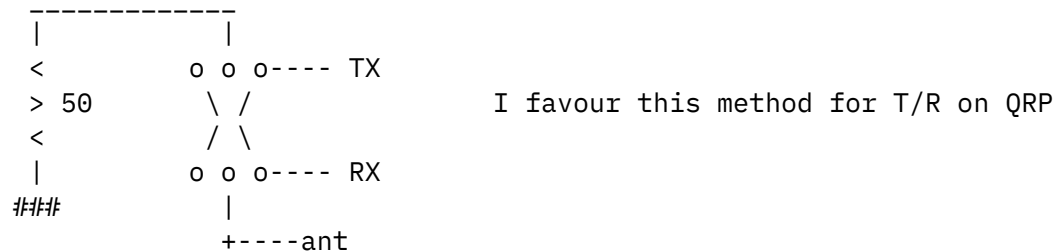
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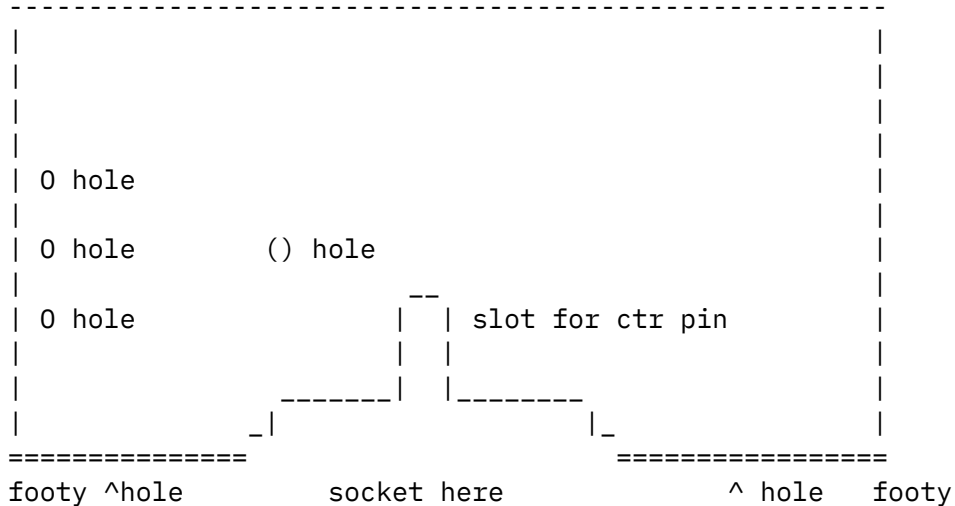
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( I got a cheap pair for \$3.00 at Walgreens)

Magnified view of cross-socket- shield: U cut to fit



Left & Right edges should contact the sides of chassie...using a bent L like shape on the edges, to clear the installation of the cover if a 5 x 3 " box ( cover is U shaped )

O Holes allow wires to get thru for key-line, B+ and Filament

() hole is for passing the grid-side of C101 thru

C1 to be on triode side of shield, C2 to be on pentode side.

This ckt I made in 1989 to try for 10 mtr CW, but not having the right crystal at that time, the ckt was relegated to just testing.  
It lit up a #47 bulb about 3/4 full brite....which is about 700mw.

By the way, I use this trick for RF and IF amps too....even tho tube is a single pentode.

To make this readable in one evening..not take all week, I'll stop here, and any one needing details,including plans for the power supply, Email me.

--

Randy KA1UNW

randy@192.153.4.200

If you get a shock while  
servicing your equipment,  
DON'T JUMP!

You might break an expensive tube!

"Works for me!"  
-Pete Keyes

----- RFC822 Header Follows -----

Received: by cpqm.saic.com with SMTP;15 Jan 1994 19:44:29 -0800  
Received: by mail.think.com; Sat, 15 Jan 94 18:04:10 -0500  
Return-Path: <randy@cyphyn.radnet.com>  
Received: from Think.COM by mail.think.com; Sat, 15 Jan 94 18:04:08 -0500  
Received: from cyphyn.radnet.com by Early-Bird.Think.COM; Sat, 15 Jan 94 18:04:02 EST  
Received: by cyphyn.radnet.com (Smail3.1.28.1 #5)  
id m0pLJze-0001UyC; Sat, 15 Jan 94 18:01 EST  
Message-Id: <m0pLJze-0001UyC@cyphyn.radnet.com>  
From: randy@cyphyn.radnet.com (Randy)  
Subject: Mini-tube TX ( 6AU8 )  
To: boatanchors@gnu.ai.mit.edu ((mail net) (boatanchor net)),  
qrp@Think.COM (qrp @think.com)  
Date: Sat, 15 Jan 1994 18:01:21 -0500 (EST)  
Cc: psc@colmiks.colmiks.com (aka (phil cook)), pjk@Think.COM (Pete at Myth),  
michael\_nagorski@quickmail.cis.yale.edu (michael nagorski)  
X-Mailer: ELM [version 2.4 PL21]  
Content-Type: text  
Content-Length: 6601

From qrp-request@Think.COM Sat Jan 8 12:28:31 1994  
Date: Sat, 08 Jan 1994 11:30:52 -0600 (CST)  
From: "JEFF M. GOLD" <JMG@tntech.edu>  
Subject: MJF audio mod

Howdi,

I think it was on this list someone posted the audio level mod for the MFJs.

I have a newer 30 meter version.. I tried the R27 shorting and it did indeed to pick the audio up a LITTLE. I tried the R35 short.. all this did in my rig was to make the background hiss louder.. the signal level stayed the same..(worstened the signal to noise ration?). Took out the R35 mod and left the other..

72

Jeff, AC4HF

I also remember reading in 73 or somewhere about a real way to improve the audio by building a mini-audio amp and attaching it near the speaker.

From qrp-request@Think.COM Wed Jan 19 01:21:32 1994  
Date: Wed, 19 Jan 94 06:17:59 GMT  
From: Randy Cole <cole@red-eft.la.ca.us>  
Subject: Msg to people who responded to my HW-8 posting

Please excuse the broadcast message, but I live in LA (a mile north of the gaps in the Santa Monica Freeway) and just found out that our offices won't be cleaned up enough for us to return to work till at least Thursday. The normal modem connection mechanisms don't seem to be functioning, and my normal mailbox is inaccessible.

This is just to let the people who responded to my posting and spoke for the rigs know that I'll get back to them as soon as possible. They can reply to me at this net address if they like, but it would also be best to cc my normal address (cole@soldev.tti.com).

Randy Cole  
KN6W

From qrp-request@Think.COM Mon Jan 10 22:44:40 1994  
Date: Mon, 10 Jan 94 22:45:15 EST  
From: majewski@erim.org (Ron Majewski)  
Subject: NA Sprint with the NorCal 40

Hello to all-

It was another exciting QRP weekend here in Michigan! I fired up the NorCal 40 that I bought from Chuck, k5fo, and ran the North American Sprint on 40 meters on Saturday night. This was my first experience with both the rig and the contest.

According to my MFJ wattmeter, the NorCal was putting out about 2watts. The antenna was a newly-constructed quarter wave ground plane. The base of this beast is about 12ft off the ground and I have six ground radials attached to it.

Band conditions on Saturday night were excellent -- no noise and propagation in all directions. I didn't have much time to operate, but I worked 18 stations in 14 states in about 45 minutes. East-West, I worked California to New Hampshire; North-South, Manitoba to Florida. An outstanding evening on 40m.

The rig is really great! The receiver stood up well to the crowded band. I could have used a bit more receiver selectivity at some points, but didn't

play with any outboard filters. The T-R switching is smooth.

Did anyone else run their NorCal in the Sprints?

72 and 3!

Ron (wb8ruq).

From qrp-request@Think.COM Thu Jan 13 09:47:13 1994  
Date: Thu, 13 Jan 94 14:41:46 GMT  
From: jkearman@arrl.org (Jim Kearman)  
Subject: NE QRP Club Meeting

Well, here it is Thursday, but it's gonna be cold Sunday, so you won't want to be outside anyway. If you can make it to Newington, CT Sunday, come to the Northeast QRP Club meeting, 10 AM. Email for directions.

We'll have W1AW/QRP on the air around 1830 UTC, usual CW frequencies.

72/73

Jim, KR1S

From qrp-request@Think.COM Wed Jan 12 12:37:23 1994  
Date: Wed, 12 Jan 94 05:29:00 GMT  
From: jkearman@arrl.org (Jim Kearman)  
Subject: New Year's Resolution

I let myself get dragged into an ARRL policy debate yesterday. Today, three or four people unsubscribed. From now on, I will not respond to any ARRL policy comments unless they are directed at me as email by the person making the original comment. My reply will go, as email, only to the person who directed his or her remarks to me in the first place.

I enjoy this list because of the low stress factor. I will do my best to keep it that way.

72/73

Jim, KR1S  
I am employed by ARRL, but not as a spokesperson.

From qrp-request@Think.COM Fri Jan 14 21:15:38 1994  
From: randy@cyphyn.radnet.com (Randy)  
Subject: no subject (file transmission)  
Date: Fri, 14 Jan 1994 21:13:09 -0500 (EST)

Twice, this has failed, including sending TO the qrp net...so. 1 more try, and if it fails...this guy is gone.

>  
> The NorCAL radio is about 15mA in receive, 2-300mA in transmit. Batteries  
> last a \*long\* time. I use 8 AA rechargable alkalines that fit nicely  
> inside the case - but would be a little hard to charge with the solar  
> setup. A 2AH gel cell would probably last a week of normal operating,  
> even if you forget to turn it off. .

>  
OH my! 15ma for rx? oh! Thats a LOT different then! and 200-300ma TX  
ah...then Norcal is in the 2 watt region...( I assumed maybe 4.5 watts)

Speaking of QRP..just 3 min ago, on 3699kc, I was hailed by a QRP out of Florida...X ruff copy, and he was using a keyer and kept flubbing things with it...but it looks like KC4GKY (something...maybe /AA or some such) so got to this machine to do a call search on him...and here you were!

I'm in Connecticut, by the way.

--

From qrp-request@Think.COM Wed Jan 19 11:59:05 1994  
Date: Wed, 19 Jan 1994 11:55:30 -0500  
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>  
Subject: Nor Cal 40 review.

I got a free World Radio in the mail yesterday, and in it was a review of the NorCal 40. It was pretty well written, and there is a picture of the rig in there as well.

Just thought that I would let you all know that it was in there in case you were interested.

73

```
-----
|  _ _ _ _ _ _ _ _ _ _ |   Bradley S. Mitchell      WB8YGG
| | / / / / / / / / |   Eastman Kodak Company
| | / / / / / / / / |   KEMD Electronic Products
| |< < K O D A K |   Circuit Board Assembly Dept. 606 Test Engineering
| | \ \ \ \ \ \ \ \ |   901 Elmgrove Road Rochester, N.Y. 14653-5211
| | _ _ \ \ _ _ _ _ _ |   (716) 726-5775, FAX (716) 726-7109
| | _ _ \ \ _ _ _ _ _ |   INTERNET: bmitchel@kodak.com
```





From qrp-request@Think.COM Sun Jan 16 23:43:12 1994  
Date: Sun, 16 Jan 1994 23:36:51 -0500 (EST)  
From: Robert Marlan <rsm@world.std.com>  
Subject: Norcal kit info

I know its been here before,  
but does anyone have the info (specs)  
and information sheet (emailable) on the norcal?

Also, if I want to order from the second run  
do you have the adress and phone of the right person.

Just finished in Oak Hills Research Spirit 40  
report to follow soon!

thanks  
bob  
KA6NOC

From qrp-request@Think.COM Wed Jan 12 15:55:14 1994  
Date: Wed, 12 Jan 94 15:01:57 CST  
From: cieslak@cg9.eda.mke.ab.com (Brian Cieslak)  
Subject: Norcal40 ?

Are there any NORCAL40 kits left????  
If so how much do I make the check out for and where do I send It.

Brian - AE9K

PS is there any more info on the nn1g mark 1 xcvr...i got the artwork,  
schematic and pl form think.com but could use parts placement guide  
and other details.

From qrp-request@Think.COM Tue Jan 11 17:10:03 1994  
Date: Tue, 11 Jan 94 17:09:29 -0500  
From: okas\_rp%ncsd.dnet@gte.com  
Subject: Ooops

>> Next question (related to the first): My junkbox (parts from junked TV  
>> sets) contains dozens and dozens of capacitors with again no pF or uF  
>> markings (especially ceramic disk caps); does the above convention also  
>> apply?

> Yes, though some of the ceramics will be coded (e.g. "103" means  $10 \times 10^{-3} \text{pF}$ ,  
> not 103pF). (The way I remember that is that 100 and 101 have the same

> meaning.)

^^^      ^^^

BZZZZZZTT... WRONG!

The best and most foolproof way to read cap values is to treat the first two digits as indicating the value and last digit as indicating the number of zeros that follow. SO, in the example above, 100 means 10 pF and 101 indicates 100 pF. BTW, since I'm a bit-twiddler by nature, I always remember 104 as 0.1 uF. Don't ask me why, I just remember it and derive the rest 8^} .

Unless otherwise rated, all ceramic caps are in pF, or mmf for us olde pFarts.

From qrp-request@Think.COM Tue Jan 11 18:07:58 1994

Date: Tue, 11 Jan 94 18:07:48 -0500

From: harvey::jfw@ksr.com

Subject: Re: Ooops

> > Yes, though some of the ceramics will be coded (e.g. "103" means 10x10<sup>3</sup>pF,  
> > not 103pF). (The way I remember that is that 100 and 101 have the same  
> > meaning.)                      ^^^      ^^^

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> 100 pF. BTW, since I'm a bit-twiddler by nature, I always remember 104 as  
> 0.1 uF. Don't ask me why, I just remember it and derive the rest 8^} .

I've never seen a cap marked "100" that wasn't 100pF, though it occurs to me that I \*have\* seen a few "680"s that were actually 68pF. Other than that one particular value, though, anything I've ever seen below 101pF (:-) has been labeled with the actual value and no scale factor.

From qrp-request@Think.COM Thu Jan 13 17:16:35 1994

Date: Thu, 13 Jan 94 14:16:19 PST

From: cole@tti.com (Randy Cole)

Subject: Pair of HW-8s for sale

QRPers:

I have two HW-8s which I bought about a year ago. Despite the best of intentions, I haven't really done anything with either one. I'd like to sell them both, and I'd prefer to sell them as a package. However, I'll at least consider reasonable offers for just one. This is what I've got:

1. A non-working HW-8. I bought it in that condition, and the only thing I've done with it is hook it to an

antenna and tune around. I heard a couple of strong stations on 40 meters but that was about it. I didn't try to transmit. The construction looks good and the case is in average or better condition (scratches but no dings or chips).

2. An HW-8 that was assembled but never aligned or tested. I haven't powered this one up. The construction also looks good, but the builder drilled a bunch of holes for a speaker in a squarish pattern in the top shell of the case. The result looks a bit messy.

I have one original manual and one copied manual.

I'd prefer to sell them both as a package, as-is, for a total of \$175 plus shipping. This is exactly what I have invested in the pair, so the price is firm.

73,

Randy Cole  
KN6W  
cole@soldev.tti.com  
310/450-9111 x2628 days  
213/939-9847 eves

From qrp-request@Think.COM Tue Jan 11 16:46:57 1994  
Date: Tue, 11 Jan 94 13:57 EST  
From: Danny Eskenazi <0005720561@mcimail.com>  
Subject: please unsubscribe

please unsubscribe...thanks K7SS

From qrp-request@Think.COM Wed Jan 12 15:33:15 1994  
From: Bob\_Fairbairn-C12509@amail.mot.com  
Date: 12 Jan 94 14:30:41 -0600  
Subject: Power For QRP

Good afternoon all;

I am getting setup for QRP ( I have one of the NorCal 40 kits on order) and I am looking into power options. I was wondering how much batter folks generally take along. I have various sizes of gel cells, but I like my little 2AH 12 cells. I was tinkering about one or two of them and a wall,solar charger system I am designing. Anybody got some input?

Bob Fairbairn KF90A

From qrp-request@Think.COM Wed Jan 12 17:26:01 1994

From: randy@cyphyn.radnet.com (Randy)

Subject: Re: Power For QRP

Date: Wed, 12 Jan 1994 17:23:23 -0500 (EST)

>

>

> Good afternoon all;

>

> I am getting setup for QRP ( I have one of the NorCal 40 kits on order) and I am  
> looking into power options. I was wondering how much batter folks generally  
> take along.

Pancake batter does not last too long...I'd say 3 cups per person per day.

> I have various sizes of gel cells, but I like my little 2AH 12

> cells. I was tinkering about one or two of them and a wall,solar charger system I  
> am designing. Anybody got some input?

>

1st...solarcells: put a 1N4001 diode and a 10 ohm resistor in series with  
the solar cell bank, to protect them in case the sun lite gets dim or out,  
and the battery is still connected....else you can damage the cells....and  
run the battery down.

Makes charging like it should be: care-free and automatic (enough, for your  
application)

Lets assume the rig draws 100ma avg on receive.

Lets assume 8 hr a day of use

Lets assume you spend 3 hours ACTUALLY transmitting ( key tapped down, total  
accumulated time)

JUST receiving, you will run the batterys out in 20 hours (omitting any  
charge-up)

Transmitting...assume rig pulls 750ma...total send time will be...about 2 1/2  
hours....or....sending/receiving, you might just make it for one 8 hour stretch.

Now add the solar charger.

EXPECT to only get 4 hours of USFUL charge per day ( clouds, overcast, and  
shadows cast by trees due to less than optimum placement of solar panel)

A 2AH battery ---if you want it to live a long time---should not be charged  
heavier than 200ma for 15 hours.

400ma for 7.5-8 hours would be as heavy as I would want to recharge them.

How much amperage does your solar panel put out?

Lets say it does 500ma, just to figure all this roughly.

Thats .5 amps for 4 real hour...2 amp hours ( translates to 1.5 amp charge-hours due to batterys being a bit 'wasteful')

Your solar panel will only help to slow down the total run out of the battery thus extend your running time some.

No..a bigger solar panel can't be used or you may hurt the battery...but, if you keep battery as a back up, and wire a big solar panel to 'charge' a large bank of capacitors ( enough to make 1,000,000 uf or more @ 15 vdc rating) then you could run direct off THAT.....capacitors act as your current reserve, for when you transmit...and gets you thru any short duration cloud-pass overs.

You'd keep the battery for when the sun isn't brite enough to do the job.

So...now you have 2 ways to go, and have a rough idea how long you can go.

====

Last nite, around 3-5 am, on 3700kc, I heard broadcast station Doitch Vella (the German one with the chimes-ID) fluttering in and out.

NO...was not IMD nor Image...they were THERE!.....lasted about 1 hour and they faded out, slowly.

--

|                     |                                    |                 |
|---------------------|------------------------------------|-----------------|
| Randy KA1UNW        | If you get a shock while           |                 |
|                     | servicing your equipment,          | "Works for me!" |
| randy@192.153.4.200 | DON'T JUMP!                        | -Pete Keyes     |
|                     | You might break an expensive tube! |                 |

From qrp-request@Think.COM Wed Jan 12 18:15:58 1994  
Subject: Re: Power For QRP  
Date: Wed, 12 Jan 94 15:08:26 PST  
From: bobh@hpesoc1.cup.hp.com (Bob Headrick)

>

> Lets assume the rig draws 100ma avg on receive.

> Lets assume 8 hr a day of use

> Lets assume you spend 3 hours ACTUALLY transmitting ( key tapped down, total  
> accumulated time)

>

> JUST receiving, you will run the batterys out in 20 hours (omitting any  
> charge-up)

> Transmitting...assume rig pulls 750ma...total send time will be...about 2 1/2  
> hours....or....sending/receiving, you might just make it for one 8 hour stretch.  
>

The NorCAL radio is about 15mA in receive, 2-300mA in transmit. Batteries last a \*long\* time. I use 8 AA rechargable alkalines that fit nicely inside the case - but would be a little hard to charge with the solar setup. A 2AH gel cell would probably last a week of normal operating, even if you forget to turn it off. .

Bob Headrick WA70VU  
bobh@cup.hp.com

From qrp-request@Think.COM Thu Jan 13 09:30:35 1994  
Date: Thu, 13 Jan 94 09:30:30 -0500  
From: wb9omc@ecn.purdue.edu (Duane P Mantick)  
Subject: Re: Power For QRP

" I heard broadcast station Doitch Vella"  
^^^^^^^^^^^^^^

Uh, that's Deutsche Welle, if my memory of taking german in high school serves me correctly. Also printed something like that in most of the SWL books.....

Duane

From qrp-request@Think.COM Sat Jan 15 20:20:05 1994  
Date: Sat, 15 Jan 94 15:19:59 HST  
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>  
Subject: PROJECT 13: ANOTHER 80M TRANSMITTER

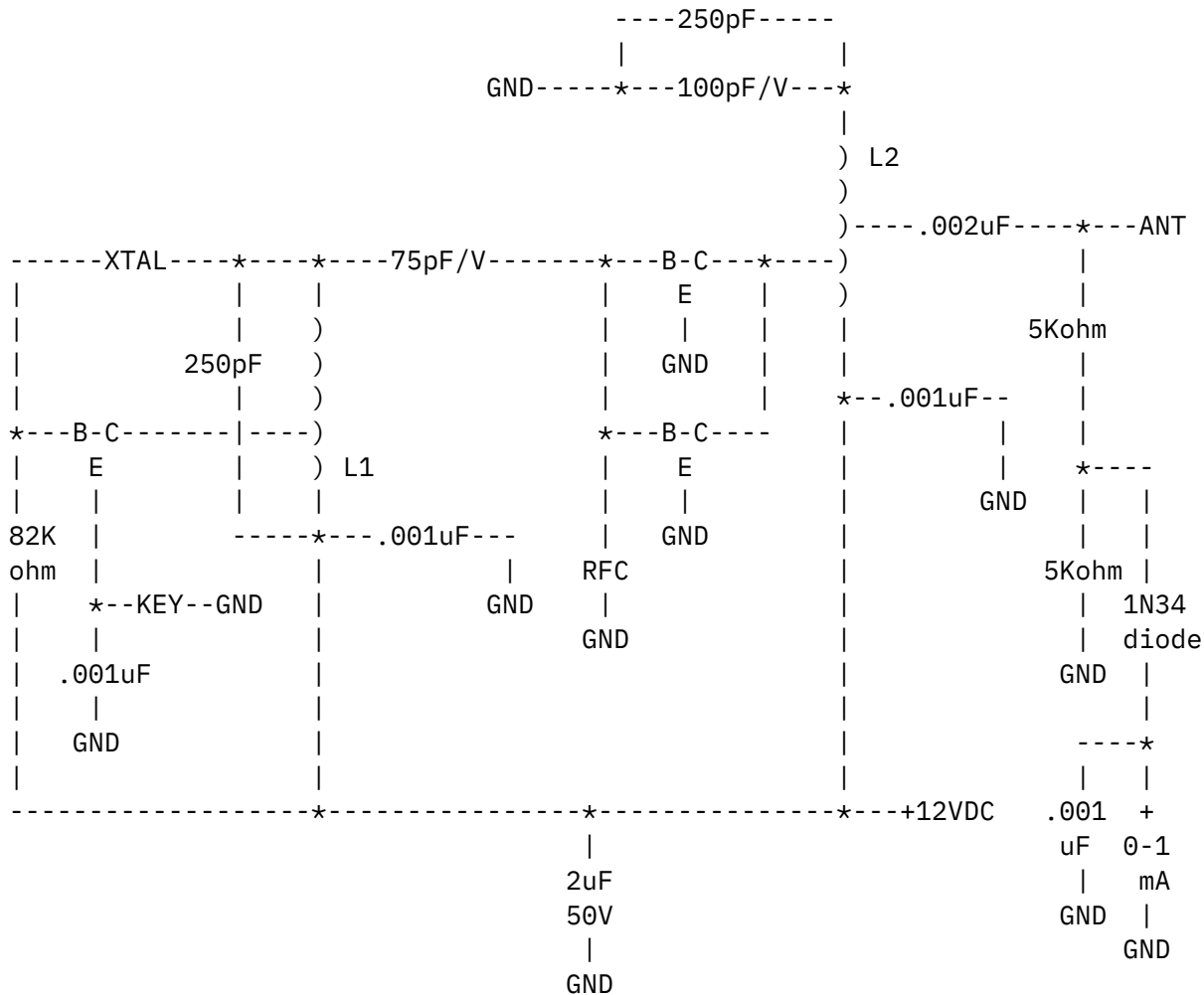
Gang,

Randy and I must be on the same wavelength today... Please look over the following circuit and try to give me the actual inductances for L1 and L2 so I don't have to BUY two B&W coil forms; specifically, L1 and the 250pf cap are in parallel, but what about the 75pf variable and the .001uF caps? I could determine L1 if just the 250pf cap was used to determine resonance, but the other two caps must effect the resosance, also. Same with L2: it's in series with the 100pf and 250pf caps (which themselves are in parallel so we'll say L2 is in series with a 350pf cap) but what about the .002uf and .001uf caps? Must they be figured in to determine the proper inductance of L2?

-----

Gang,

Here's another 80M xmtr; this one's supposed to be capable of 1-2 watts. I got this out of a book called ``1000 Transistor Circuits'' or something like that.



The 3 transistors are 2N2270. Two capacitors show: /V - means variable.  
L1 is 30 turns on a B&W #3012 coil form, with a tap 10 turns from bottom.  
L2 is 18 turns on a B&W #3015 coil form, tapped 3 and 7 turns from bottom.  
Only numerical values were given for the capacitors so I've interpreted this as ``whole number values are in pF and decimal values are in uF'', except the 2uF 50V cap - that was specified.

The 1N34 diode's symbol should be oriented: \ /

to meter

Now yank that 3579 kHz crystal out of your color TV set and have fun!

Jeff NH6IL

From qrp-request@Think.COM Fri Jan 14 12:02:20 1994  
Date: Fri, 14 Jan 1994 11:04:29 -0600 (CST)  
From: "JEFF M. GOLD" <JMG@tntech.edu>  
Subject: project cases

Howdi,

I have been thinking about QRP cases.. they seem real expensive... I think they were about \$10. Today in the computer center at work I was kidding with our operations manager about the little metal boxes that are used for AB switches.. either the serial or parallel.. they are about perfect size for a lot of the QRP kits and projects I have come across.. He informed me the whole switch box was purchased for \$3.85. The case seems more heavy duty than the kits I have built.. and figured you might be able to use the switch itself for something and just through a coat of paint on the outside of the box.

72

Jeff, AC4HF

From qrp-request@Think.COM Wed Jan 12 12:19:07 1994  
Date: Wed, 12 Jan 94 11:18:52 -0600  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: QQ Jan issue

Last night in phone qso with Mike Kilgore, Membership Chairman to QRP ARCI, he mentioned that the mailing labels had been sent to the printer (in Alpine TX) of QQ and thus they should be in the mail soon, if not already.

dit dit  
Chuck Adams  
adams@sgi.com

From qrp-request@Think.COM Thu Jan 20 21:36:44 1994  
Date: Thu, 20 Jan 94 21:10:43 -0500  
From: comas@dwcu03.nyo.dec.com (andrew comas)  
Subject: QRP Plus Address

Sorry I forgot to post an address and phone number.  
The QRP Plus HF Amateur Radio Transceiver (it's not a kit) is:



Index Laboratories  
9318 Randall Dr. NW  
Gig Harbor, WA 98332  
206 851 5725

andrew KF2JH

From qrp-request@Think.COM Thu Jan 20 11:36:49 1994  
Date: Thu, 20 Jan 94 10:58:57 -0500  
From: comas@dwcu03.nyo.dec.com (andrew comas)  
Subject: QRP Plus Rig Review

Well 6 months after ordering it, my QRP Plus arrived. A small box (5.5"w x 4"h x 6"d) and a lot heavier than I thought, maybe 4 pounds. The QRP Plus covers CW & SSB 160 meters through 10 meters. 5 Watts out on SSB and 0 - 5 watts on CW. It has a SCAF digital audio filter covering 100hz to 2400hz in 100hz steps. 20 memories, split and rit operation, and full break-in QSK. It also has a 20dB attenuator, a separate receiver antenna input and power/S meter. It claims .14 Amp (140 ma) power draw on receive and 1 Amp on transmit at 12 V and an automatic turn-off at 11V and below. I measured .13 Amp (130ma) on receive with 50% volume, 147ma on 100% volume. Transmit drew 1.15 Amps normal and 1.51 Amps on >3 SWR. I haven't tried the 11V auto-off feature, but this would be great for not killing off gel-cels.

The unit is well made. Heavy 1/8" aluminum box holds 5 pc boards, 4 boards stacked on top of each other, separated by plastic-covered aluminum shields. The one other board holds the LCD and switches. Attached to the top cover is a large 3.5" speaker. The wiring is well laid out. The PC boards are connected with a detachable ribbon cable. I believe Bruce Franklin of Index Laboratories makes medical equipment and he applied those high standards to this little rig. Large switches, buttons and knobs make it a pleasure to operate. The display is easy to read, nice large .5" numbers on a .75" display. The fuse is mounted on the back in a standard fuse holder.

The heart of this rig is an Intel 80C39 microcomputer chip. The chip controls the synthesizer (frequency control), display, filters, RIT, split frequency operation, iambic keyer, sidetone, and memories. I spent some time talking with Bruce about his selection of this chip. (My first job out of college was using these microcomputer chips to build embedded systems). I asked him why he used the 8039 instead of the 8051 (a slightly newer and more functional chip). He said that the 8051 was more RF sensitive. Well I have seen RF reset 8051s many times myself and spent plenty a night trying to prevent just that. He

has put plenty of research into this rig. Another example is the easy-to-access, standard lithium battery (for memory backup), as well as recessed pots to set CW power, sidetone and mic-gain. He also includes a nice large tuning dial with a finger point for easy tuning.

Having a nice tuning dial is very important, especially since all your selections are done by it. You press a FAST, MEMORY, or BANDWIDTH button (or combination to store into memory or set keyer speed) and then turn the main tuning dial to select. In frequency mode one full turn is 4Khz, in fast frequency mode one full turn is about 60Khz. You cover all the BANDWIDTH filters in a half turn, all 20 memories in 3 1/2 turns.

The head phone jack is set for walkman type stereo headphones (don't try mono headphones; they won't work unless you plug them in half-way). The volume output for the headphones is more than adequate. I never get beyond 3/4.

The receiver really shines. I could hear a lot more than I could ever hope to work and the SCAF filter is remarkable. You press the BANDWIDTH button and the display shows you the SCAF filter frequency in Khz. At 2.0 Khz, SSB is really clear, at .1 Khz it's a CW pile-up solver (or so says Bruce). The filters work very smoothly.

Other nice features are:

There are three recessed pots on the back which set:

- Mic Gain

- CW output power 0 - 5 watts continuous

- Sidetone volume (not frequency)

The MEMory button toggles between the frequency in memory and the working frequency. A nice way to monitor a net or sked.

The iambic keyer is not ready yet, but will be a free update when it is. The box is pre-drilled and labeled for the plug. So all that's needed is to upgrade the EPROM (the key is simulated in software like the CMOS Super Keyer II is) and the jack. The keyer speed is set via the main tuning knob and a button press.

As with everything I have my complaints. The antenna connect is via a standard BNC instead of an SO-259 connector. The FAST tuning button moved at 60Khz per tuning dial turn. There needs to be a 1Mhz rate for quickly tuning bands. Of course this is only a pain until you set memories and use them to set bands. (The rig has some preset band frequencies which you can re-load into memory). I would have added a light for the LCD, but Bruce decided to save the 20-30ma and not add one (I asked him about this). I built my own mic from the Radio Shack speaker mic, but I couldn't get the mic gain to give more

than 1 Watt out on SSB. Bruce said people were having mixed results with building their own. Index Labs will be selling one as an option.

Other observations: As we see more and more things controlled by computers, functionality won't be our complaints, software bugs will be. And I hit one. When in RIT mode, pressing REVerse is suppose to give you the transmit frequency. It doesn't. It sets the receive and transmit frequencies to the RIT frequency. Nothing major and Bruce promises to fix it with the iambic keyer upgrade. Also the display frequency on my rig has a tendency to drift down 100hz after the first transmit. This is solved by switching into SPLIT mode. The SPLIT mode locks the frequency in and disables the tuning knob (and yes this means the BANDWIDTH control is locked out too, another software bug to be fixed). But on the upside, a software controlled rig allows for more functionality. Bruce is talking about letting the user set the QSK break-in time, paddle reverse all of which can be accomplished via software. The rig does not reduce power on high SWR since the transmit components are rated at much higher power levels than 5W, but may produce spurious signals.

Overall this is a fabulous rig for the money (\$595). It was built by a man who loves QRP for the QRP lover and it shows.

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From qrp-request@Think.COM Thu Jan 20 13:25:00 1994  
From: swm@homxb.att.com  
Date: Thu, 20 Jan 94 11:18 EST

Hello QRP netters!

For those who responded to my request for a parts list and schematic for the NN1G transceiver, my eternal thanks.

I now am accumulating the parts necessary to build the NN1G Mk II transceiver. Most of the parts are easy to come by. But the 10.7 MHz IF transformers are not specified in the parts list. Does anybody have a part number? Any ideas on turn ratios and/or nominal inductance? There are several types that are available from different suppliers but I don't know which should be used (my guess is that the choice is not that critical).

Any ideas?

72/73 de ND3P  
Scott McLellan

From qrp-request@Think.COM Thu Jan 20 13:44:47 1994  
Date: Thu, 20 Jan 94 10:58:57 -0500  
From: comas@dwcu03.nyo.dec.com (andrew comas)  
Subject: QRP Plus Rig Review

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From qrp-request@Think.COM Wed Jan 12 17:16:52 1994  
Date: Wed, 12 Jan 94 17:16:47 -0500  
From: wb9omc@ecn.purdue.edu (Duane P Mantick)  
Subject: QRP power

Bob Fairbairn asked about power for QRP rigs/ops. Seems like a real good topic to me.

I have used a 12v 6.6AH gel cell in the past to run my HR2510. Works real nice, never did try to really run it down in actual operation for fear of doing some radio damage. But I can recall running for at least 2 or 3 hours off it with no problems.

Now these days I am getting real interested in solar power. The newest Edmund Scientific catalog has some nice cells for those who want to build their own panels, plus they have some complete panels. Still not REAL cheap, but getting better all the time.

Digi-Key is selling the Panasonic/Matsushita Sunceram II units, including at least one and possibly more full panels.

The idea of combining the two (batteries and solar cells) for a rechargeable source makes a great deal of sense to me. A true QRP rig of only a couple watts could probably run off my 6.6 AH battery for QUITE a long time.....one could use two batteries, opping off one while the other charges - just as one example.

Now to be more exotic, crock up a big enough solar panel to skip most of the battery middleman.....hmmmm.....

"WB90MC/QRP/SOLAR" has a nice ring to it... :-)

Duane

From qrp-request@Think.COM Sat Jan 8 13:56:31 1994  
Date: Sat, 08 Jan 1994 13:56:07 -0400 (EDT)  
From: BHOWLE@delphi.com  
Subject: QRP Slug For Bird

Has anybody ever seen a QRP slug for a Bird watt meter - I'd sure like to find one that'd cover the HF range and measure up to abt. 10 watts.

TNX  
BOB  
IN  
MS

From qrp-request@Think.COM Tue Jan 18 12:48:09 1994  
From: mvjif@mvubr.att.com  
Date: Tue, 18 Jan 94 12:22 EST  
Subject: QRP-NE Application

QRP-NEW ENGLAND

The membership/renewal application was ommitted from the QRP-NE Newsletter "72" accidentally. Please find it encl.

Also, minutes of the 1/16 meeting of QRP-NE at ARRL HDQ to follow soon.

Great to work so many QRP-NE members from W1AW/qrp.

73/72 Jim Fitton, W1FMR QRP-NE mvjif@mvubr.att.com

QRP - NEW ENGLAND  
THE N.E. QRP AMATEUR RADIO CLUB

APPLICATION FOR MEMBERSHIP OR RENEWAL

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Call Sign: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Street Address/P.O. Box: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

License Class: \_\_\_\_\_ Age: \_\_\_\_\_

Year First Licensed: \_\_\_\_\_ Former Calls: \_\_\_\_\_

Please indicate whether you are also a member of these QRP organizations:

QRP-NE Number (FOR Renewals): NE \_\_\_\_\_

QRP - ARCI Yes \_\_\_\_\_ No \_\_\_\_\_

Michigan QRP Club Yes \_\_\_\_\_ No \_\_\_\_\_

G-QRP Yes \_\_\_\_\_ No \_\_\_\_\_

What QRP awards have you won or achievements have you accomplished? \_\_\_\_\_

Please indicate whether you are member of the ARRL Yes \_\_\_\_\_ No \_\_\_\_\_

Would you like to be an office/director of QRP-NE?  
Yes \_\_\_ No \_\_\_ Maybe \_\_\_

Would you like to help write for the QRP-NE Newsletter?  
Yes \_\_\_ No \_\_\_ Maybe \_\_\_

Please circle your chief interests:

Ragchewing DX Contests Traffic Awards Homebrew VHF/UHF Packet

CW SSB RTTY ATV Satellite other: \_\_\_\_\_

Annual dues are \$10.00 for new members. Renewals are \$7.00 per year.



Membership includes a subscription to "72", the QRP-NE newsletter.  
All membership renewals are due between January 1 and March 1 of each year.  
Please make your check or money order payable to "QRP Club of New England."  
Please put your callsign and QRP-NE number (if any) on your check! Mail to:

|                     |                      |
|---------------------|----------------------|
| New Members: (\$10) | Renewals: (\$7)      |
| -----               | -----                |
| To Jack Frake, NG1G | To Paul Kranz, W1CFI |
| POBOX 1153          | 26 Mettacomett Path  |
| Barnard VT 05031    | Harvard MA 01451     |

From qrp-request@Think.COM Thu Jan 20 20:55:23 1994  
From: mvjfm@mvubr.att.com  
Date: Thu, 20 Jan 94 20:49 EST  
Subject: QRP-NE meeting

Minutes from the New England QRP (QRP-NE) Club  
meeting held on January 16, 1993 at ARRL Hdq.,  
Newington CT

16 attended, many driving for 3 hours in bitter cold, with  
temperatures hovering around 0 degrees F. But friendly  
spirits, conviviality, and the extreme southern location of the  
state of Connecticut provided a welcome relief from the really  
cold weather further north.

Thanks to Jim Kearman, KR1S, QRP-NE contest manager, for hosting  
the visit and Norm Bliss, WA1CCQ, W1AW radio engineer, for coming  
in on Sunday and making us feel very comfortable and welcome at  
the radio station(s).

Upcoming QRP-NE meetings in 1994 will be held at Dayton OH in April,  
Deerfield or Rochester NH in May, (meeting Sun. 10 - 11 a.m.)  
Field Day at Princeton MA in June,  
Boxboro MA in October

In addition Harry, W1LMU is going to reserve tables at local  
flea markets set for late winter and early spring.  
Check into local CW, SSB nets for additional information.  
NEN, SAT., 8 a.m., 7.040 mHz,  
NE, Mon., 9 p.m., 3.855 Mhz (dead lately)  
GLN, Thurs, 9 p.m. 3.060 mHz,  
NEN, Tues., 8:30 p.m. 3.035 mHz

Some of the HB rigs brought along to the meeting were:  
2 NN1G-20s, 40/40 prototype and printed board version,

NorCal-40, OHR Spirit, and more.

Thanks to Randy, KA9HA0 who provided a quantity of new relays, surplus from his parts business, to give away at the meeting.

Mark, NX1K reported on our outstanding 1993 Field Day performance. Some have already signed to participate in 1994, but more loggers, antenna experts, SSB, and CW ops, and guitar players will be needed this year. The potential for many more contacts would have been there last year if we had more SSB operators.

I am eagerly looking forward to the QRP-NE club pioneering a QRP Mini-Field Day event in Sept. or Oct., and I am now in the process of constructing 2 mini rigs, tuners, and SWR meters in anxious anticipation of that event.

Dave, NN1G brought to the meeting, the prototype 40/40 meter HB club project transceiver and the new printed wiring board version. Although the printed board didn't arrive until Saturday, Dave worked through the night and barely completed the rig in time for the meeting on Sunday. Great work Dave !!

QRP-NE was suitably impressed with the appearance of the board, HB enclosure and Dave's tenacity to get a job done. The little Superhet transceiver was enclosed in a clever box frame easily duplicatable with simple hardware and tools. Dave will photograph and detail it in a future issue of "72".

Eric, KA1EEC volunteered to help with kits and instructions. Jack, NG1G ( currently camping in the Virgin Islands) previously offered to distribute, and help distribute kits. The current goal is to have kits to sell at Dayton, in April. Thanks to Dave for the outstanding craftsmanship and leadership on this project. The success of this venture will pave the way for more of these terrific HB projects in the future.

Luke Dodds, W5HKA passed away recently from a heart attack. Luke was Secretary-Treasurer for the QRP Amateur Radio Club International club for many years and will be missed by all who knew him, including his special friends in the G-QRP and OK-QRP clubs.

Carl, N1CUU handed the "72" editorial baton to Dennis, K1LGQ. Thanks Carl for two years of excellent craft and leadership providing your mates with a superior journal. Carl intends to maintain close ties with the newsletter, and we are fortunate for his effort.

A special hearty welcome to Dennis K1LGQ. Dennis worked on the January issue which turned out very nice with graphics and creativity. Congratulations.....

Attending the meeting were:

|             |             |              |               |
|-------------|-------------|--------------|---------------|
| Mark, NX1K  | Jim, KR1S   | Eric, KA1EEC | Zack, KH6CP/1 |
| Mark, KE1L  | Dave, NN1G  | Jim, W1FMR   | Dennis, K1LGQ |
| Mike, KC1SX | Derek, WM1U | Larry, K1LO  | Randy, KA9HA0 |
| Bill, AE1D  | Mike, KD1BF | Bill, N1OSA  | Bob, KA6NOC   |

Over half of those present at the meeting communicate via Internet or electronic mail. Is this a growing trend ? Carl, N1CUU is being financed by the club for about \$20 per month, in order to tap into the wealth of QRP information available on Internet. Members in turn will receive some of this excellent information via "72".

"The Excitement Is Building"

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com

From qrp-request@Think.COM Sun Jan 9 12:17:15 1994  
From: Rodney Clayton <rclayton@umd5.umd.edu>  
Date: Sun, 9 Jan 1994 12:17:11 -0500  
Subject: QRP:Hamfest crystals?

What should I expect to pay for 7MHz crystals at a hamfest?  
Is the load capacitance marked on the crystal?  
Thank's Rod KA3BHY

From qrp-request@Think.COM Sun Jan 9 13:39:58 1994  
From: randy@cyphyn.radnet.com (Randy)  
Subject: Re: QRP:Hamfest crystals?  
Date: Sun, 9 Jan 1994 13:37:13 -0500 (EST)

>  
> What should I expect to pay for 7MHz crystals at a hamfest?  
> Is the load capacitance marked on the crystal?  
> Thank's Rod KA3BHY  
>  
The cost will vary...anywhere between 50c and \$2.00

Load uuf is generally not marked....but you don't worry about that...you can fiddle with the osc. to get it on freq in many cases.

All my crystals, That I got recently, are almost 1 kc low ...  
[[ in the ckts I used ]] ... I could have just as well, chosen a ckt  
that would put them 1 kc above! However, I find the freq I am on, are  
just as good as the ones I selected to begin with.

--

Randy KA1UNW                      If you get a shock while  
                                 servicing your equipment,                      "Works for me!"  
randy@192.153.4.200                      DON'T JUMP!                      -Pete Keyes  
                                 You might break an expensive tube!

From qrp-request@Think.COM Sun Jan 9 21:56:16 1994  
From: andrews@fms.com (Andrew Sargent N80FS)  
Subject: Re: QRP:Hamfest crystals?  
Date: Sun, 9 Jan 1994 21:52:37 -0500 (EST)

> From: randy@cyphyn.radnet.com (Randy)  
> Subject: Re: QRP:Hamfest crystals?  
> To: rclayton@umd5.umd.edu (Rodney Clayton)  
> Date: Sun, 9 Jan 1994 13:37:13 -0500 (EST)  
> Cc: qrp@Think.COM (qrp @think.com)  
> In-Reply-To: <199401091717.MAA28381@yorick.umd.edu> from "Rodney Clayton" at Jan  
9, 94 12:17:11 pm  
> X-Mailer: ELM [version 2.4 PL21]  
> Content-Type: text  
>  
> >  
> > What should I expect to pay for 7MHz crystals at a hamfest?  
> > Is the load capacitance marked on the crystal?  
> > Thank's Rod KA3BHY  
> >  
> The cost will vary...anywhere between 50c and \$2.00  
>

I've seen quite a few rocks at various frequencies going for \$.25 to  
\$7.00. It also depends on the 'fest...

--

Mesmerized by a decade of hate,                      ! AMATEUR = N80FS  
Flowers and remorse,                      ! ARMY MARS = AAN5HJT  
Fading vision lost in time,                      ! CB = THE NEON KNIGHT  
Tragedy on course!!! - Frontline Assembly ! HACKER = TH3 N30N KN16Ht

From qrp-request@Think.COM Sun Jan 16 18:20:19 1994  
Date: Sun, 16 Jan 94 15:19:19 PST  
From: dh@deneb.csustan.edu (Doug Hendricks)  
Subject: QRPp Back Issues Available

I have been asked by many of our subscribers to make the back issues of  
QRPp, the Journal of the Northern California QRP Club, available. I have

made copies of the back issues, but there is good news and bad news. The good news is that they are available, the bad is that they are expensive in small quantities. I have decided to copy and bind all of the first three issues of Volume I into one book. It has original quality copies of Issue #1, #2, & #3 bound with a plastic finger binder and with a heavy card stock front and back cover. It is the same exact binding as the reprints that I do of QRP Quarterly, only in the 5.5 x 8.5" format.

Please do not ask for individual issues, they are not available. The bound, complete 3 issue set is available for \$10, postpaid. If you want a copy, send me \$10 with your name and address. Make checks and money orders out to me. I know that some of you are going to say, "Why are the back issues more than the originals?" The answer is that when you do printing in small quantities you have to pay much more, and also, these are punched and bound into the 1 book. The book is 140 pages, with 32 pages in issue #1, 48 pages in #2, and 60 pages in #3.

72, Doug, KI6DS, 862 Frank Ave., Dos Palos, CA 93620

For those of you wondering, QRPP is the Journal of the Northern California QRP Club. It is published quarterly in March, June, September and December. There is no advertising, just QRP information and plenty of it. If you are interested in subscribing and becoming a member of NorCal, the cost is \$5 per year. Send subscriptions to Jim Cates, WA6GER, 3241 Eastwood Rd., Sacramento, CA 93620. Foreign orders send \$15 per year. We have 260 members as of Jan. 16, 1994.

72, Doug

From qrp-request@Think.COM Sun Jan 16 22:35:14 1994  
Date: Sun, 16 Jan 1994 21:21:38 EST  
From: wwm@wa8tzg.mi.org (Bill Meahan)  
Subject: Re: QRPP Back Issues Available

>72, Doug, KI6DS, 862 Frank Ave., Dos Palos, CA 93620

>

>72, Doug

^^

Is this a QRP version of 73?? :-) :-)

--

Bill Meahan WA8TZG

wmeahan@wa8tzg.mi.org

Hey, this is my OWN computer! I can say what I want!

cat: a purr bearing mammal

From qrp-request@Think.COM Mon Jan 17 22:23:16 1994

From: Rodney Clayton <rclayton@umd5.umd.edu>

Date: Mon, 17 Jan 1994 22:23:05 -0500  
Subject: Re: QRPp Back Issues Available

Actually I was wondering how you got your own computer on internet.  
Could you tell me how you go about that and what it costs?  
Thank's Rod KA3BHY rclayton@umd5.umd.edu

From qrp-request@Think.COM Tue Jan 11 12:42:19 1994  
Date: Tue, 11 Jan 94 17:15:41 GMT  
From: jkearman@arrl.org (Jim Kearman)  
Subject: QST Articles

Ed Parrish says Motorola doesn't publish articles in QST.  
Not lately, but we have published articles by Motorola  
application engineers in the past: Helge Granberg's name  
comes immediately to mind. At least one well-know QST  
author specializing in microwave circuits is an applications  
engineer for the company that manufactures the semiconductors  
he features. Does anyone recall "Narrowband Voice Modulation,"  
by the way? How 'bout the Collins engineers who wrote articles  
on single-sideband?

Back in the "good old days," many QST articles were supplied  
by RCA engineers, using (surprise) RCA tubes. Yes, RCA sometimes  
\_licensed\_ other companies to make the same type numbers, but  
they sure weren't giving away the blueprints. I think QST has  
remained free of the wanton collusion between advertisers and  
editorial content one sees in other magazines on the newstands.

The CMOS Super Keyer and W9GR DSP filter have been phenomenally  
popular articles. The vast majority of QST readers have no  
interest in knowing the source code for projects. Yes, the  
authors are making money on these projects, and what's wrong  
with that? How many hours did it take those folks to write  
that code? How many of you are willing to devote that much  
time to something and then give it away? (I don't recognize  
any QST authors among those who protest our policy.)

The Brave New World is upon us. I just scrapped an otherwise  
good VCR because NEC no longer supplies a custom IC needed  
to fix it. I wasn't building my own 6146s in 1963 and I don't  
expect to build my own 486 CPU chip tomorrow. I can take  
advantage of the work of others, if I'm willing to pay for it.  
I sure as heck can't fix a computerized fuel injected car--should  
we go back to carburetors and breaker-point ignition?

The limited amount of money (ham radio isn't quite as big a market as, say, VCRs) these authors make selling programmed parts is fair compensation for building, debugging and WRITING ABOUT a project. I know a ton of hams who are doing really neat stuff. Some of them even complain about what others are publishing in QST, saying it isn't up to date. When you corner these people and send them Author's Guides, though, they disappear into the basement.

Someone mentioned "owning" what's in the magazine. Well, that's just not true. ARRL owns the copyright to QST. You get a license to read it when you join. If you start making and selling photocopies you're going to hear from our counsel! The author of an article that uses proprietary source code is licensing us to license you to build one, just as buying an MRF475 licenses you to use it in a circuit, not replicate it. Yes, these authors could license you to zap your own ROM. How many people would be selling those ROMs at Dayton this year, without paying royalties to the author? My guess is, plenty. It's a lot harder to spot such dishonesty than it is to spot bootleg copies of QST. Facing up to reality, the authors keep the source code to themselves.

For the handful of people who've said they agree source codes should be made available, I admire your thirst for knowledge, but I hope you can recognize the changes coming down the road. I expect to live to see a single-chip receiver where all functions are done in DSP. I don't expect the people who accomplish this miracle to give away the source code. If I did it, and I had the choice of either giving it away, or making a few bucks to maybe do something for my family to compensate for the time I spent in away from them working on the project, I know what I'd do.

In the ideal world, everyone would do the right thing with no thought to personal gain or profit, right? If these authors could be certain that someone else wouldn't start hawking the ROMs for profit, they might make the source codes available. But why should my labor profit you, who do nothing but run a ROM programmer? If there's money to be made, why shouldn't I make it? On the other hand, if they offer a construction article for this project to QST, I will vote to accept it, even without source code.

I've really rattled on here, but I expect this to be my final word on the subject: "What's worth doing is worth being paid for." (Donohue's Law). I'll prepare a summary of the arguments presented on this subject, and present it to my managers.

73,

Jim Kearman, KR1S  
ARRL HQ

From qrp-request@Think.COM Tue Jan 11 13:01:23 1994  
Date: Tue, 11 Jan 1994 12:03:36 -0600 (CST)  
From: "JEFF M. GOLD" <JMG@tntech.edu>  
Subject: QST articles

Howdi,

probably get fried for this and accused of all sorts of nasty things..but hasn't stopped me before:

OK, I understand what many people perceive as the problem with authors selling things related to their articles (guess I write the wrong kind of articles). There is another side to the story. Way before I started writing, I was reading and building from QST articles. I built the CMOS Super Keyer II. I enjoyed reading the article and sent off for the Idiom Press kit.. think it was one of the first things I built. I enjoyed building it and was real pleased later on when it outperformed anything else I have ever used.. bargain to boot.. at the price they sold it for.. I just don't have a problem with them selling it. I also read the article on the DSP unit. I really enjoyed the article.. probably never had heard of DSP and ham radio together other than Kenwood adds. I once again ordered the kit.. again it performs really well, I got to build it and think it was well worth the money.

OK, this is what it comes down to for me: I read QST to learn about aspects of the hobby that I haven't previously been exposed to (and slobber over add for equipment I can't afford) and find out things that will make the hobby even more enjoyable than it already is. Well the articles in question sure fit my needs. I have more of a problem with the other magazines I subscribe to.

72

Jeff, AC4HF

From qrp-request@Think.COM Tue Jan 11 11:36:48 1994  
Date: Tue, 11 Jan 94 10:43:27 CST  
From: cieslak@cgc9.eda.mke.ab.com (Brian Cieslak)  
Subject: QST COnstruction Articles



Ed PARish hit it right on the head...I think the authors are writing articles to promote their products in QST instead of using it a Journal for sharing ideas among the Ham radio community and fellow members of the league.

All were really asking Jim, is that we have the opportunity to complete the project with the information presented in the article. It is pretty frustrating to get all pumped up over an article and then find that I have to shell out another \$50 bucks to buy a key component from an author, who has grossly marked up a component's price (single source, yet) to complete it. Have you ever tried ordering parts from some of these authors? If your lucky enough to actually get the parts after your check is cashed its usually after long delays because some private individual, the author, wasn't prepared to handle the avalanche of orders he got.

Would QST publish a transmitter and receiver article and not put values on the caps and resistors at the request of the author inorder to force the reader to buy the authors kit. Thats they way I and apparently many of the others on this net feel about not having the source code available for the projects in QST.

I would also strongly recommend that QST re evaluate it's comment about the tiny number of readers who want to program their own roms. I think there are more than they might realize.

I have no problem with the author providing the service of selling a pre programmed part for those who wish to buy one. But don't force use to do it in order to finish a project that appeared in a magazine that is supposed to be a membership service.

73,  
Brian - AE9K

From bruce@Think.COM Tue Jan 11 11:45:09 1994  
From: Bruce Walker <bruce@Think.COM>  
Date: Tue, 11 Jan 94 11:45:09 EST  
Subject: QST COnstruction Articles

\*\*\*\* TIMEOUT \*\*\*\*

While this discussion about QST construction articles and source code is interesting to me, it has nothing to do with QRP, except to the extent that we are disproportionally more apt to be homebrewers/kitbuilders.

I'll resist the temptation to fan the fire by injecting my own views on this subject, or perhaps I will mail them directly to the active

participants of the discussion.

Let's try to keep focus here...asking opinions about or availability of keyers is relevant enough, but a flame war on QST construction article policy isn't.

Thanks,  
--bruce WT1M

From qrp-request@Think.COM Wed Jan 12 10:46:27 1994  
From: lapin@casbah.acns.nwu.edu (Gregory Lapin)  
Subject: QST COnstruction Articles  
Date: Wed, 12 Jan 1994 09:46:12 -0600 (CST)

cieslak@cg9.eda.mke.ab.com (Brian Cieslak) wrote:  
> Ed PArish hit it right on the head...I think the authors are writing articles  
> to promote their products in QST instead of using it a Journal for sharing  
> ideas among the Ham radio community and fellow members of the league.

We get a lot of journals here and generally categorize them as follows:  
Technical Journals (IEEE Transactions, Most medical journals),  
Professional Journals (IEEE Spectrum, EMB Magazine), and  
Throw-Away Journals. The Throw-Aways generally have lots of ads and some  
articles written by people from companies that tend to be promoting  
products.

I always considered QST to be in the Professional category. It seems to be  
drifting toward the Throw-Away category.

Is this what we really want?

Greg Lapin  
KD9AZ

From qrp-request@Think.COM Tue Jan 11 12:17:29 1994  
Date: Tue, 11 Jan 94 11:24:14 CST  
From: cieslak@cg9.eda.mke.ab.com (Brian Cieslak)  
Subject: Re: QST COnstruction Articles

Ok Bruce,

You're RIGht....Enough is enough....but it sure was fun....Jim just hit a hot  
button.

anyone interested in starting a magazine with micro based ham articles that  
give the whole story let me know off line.

Brian - AE9K

From qrp-request@Think.COM Fri Jan 21 20:08:08 1994  
Date: Fri, 21 Jan 1994 19:10:24 -0600 (CST)  
From: "JEFF M. GOLD" <JMG@tntech.edu>  
Subject: Radio Kit review

all,

I think overall Chuck was much too kind. I have spent a few weeks working on this. If the kit was done correctly I could have finished it on a Saturday and really enjoyed it.

The board is the worst I have ever seen.. doesn't solder great, you get one chance..even with good desolder tools.. you have to drill out the board in many places.. like for an adjustable board mounted pots (think there are 3 or 4) holes are left out, holes aren't orderly or logical, parts stink.. many pages of mod to mod.. soldering modifications on the bottom of the board..the parts overlay doesn't look a whole bunch like the board and like Chuck says.. schematic isn't correct and I find it hard to follow.

I use to like building before this one.. I don't think someone could make a worse kit..except by trying REAL hard.

At first I thought the non-silk screened board was throwing me.. then looked over to the \$29 Spider sitting on the bench waiting to get a VFO and it was fun to build.. no silk screen.. good board..bottom looks good and work fine the first time. The NN1G I built didn't have silk screen.

AVOID unless you want a real challenge... anyone want a partially completed one for \$70 shipped US.. I am about ready.. have some projects I would like to start.. I have been forcing my self to put a few parts on every day.. sure don't look f

From qrp-request@Think.COM Fri Jan 21 18:11:14 1994  
Date: Fri, 21 Jan 94 17:11:04 -0600  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: RadioKit Review

January 21, 1994

Gang,

RadioKit Notes by Chuck Adams, K5FO

After helping one individual build one of these critters over the phone, I got another call this week from another ham in the mid-cities area of Dallas-Ft Worth about another one.

Background: This ham had been QRT for 20+ years, so in June got active again by buying the MFJ-9020 at HamCom in this area. He is having a blast using this little setup with a simple dipole.

He bought the RadioKit QRP-30 kit. Since he was having some difficulty, I drove 40 miles over to his place to take a look at it. I wound up spending about 3 hours working on odds and ends.

His wiring job was pretty good and I found only one solder bridge. The spacing between some of the paths on the PC board were very tight.

Here are just some of my notes on the kit:

1. Very small board compared to other K1BQT kits and NN1G rig.
2. Not silk screened, not solder masked. Just a single sided board.
3. I'd personally grade the parts quality as a B.
4. I'd grade the board as a D. We had to drill four of the holes that were missing. For a beginner with minimum tools, this would really cause problems.
5. About a half-dozen components were missing.
6. I don't like the relay for QSK. I think the solid state switching that everyone else uses is vastly superior. And cheaper too.
7. We didn't get to installation in case, as board was unfinished.
8. I think that everyone has to write a better set of instructions on the art of winding toroids or refer the builder to the ARRL handbook.
9. Schematic is wrong in some places, as I found out by tracing paths on board and components. I knew from the schematic, upon close examination, that there was no way this puppy was going to work if the board was really setup per the schematic. I have the K1BQT schematic, NN1G, and some of the others memorized. :-)

10. Air variable capacitor was shorted. I believe the plates are just too close and would think that more than 30% of them would be shorted from the factory. Also, this will tend to cause thermal drift problems for the vfo.

More notes as he gets the missing parts and brings rig over for tuneup and alignment and the 'smoke test'.

Overall, I'd spend my money on something else for a xcvr kit. And I have. :-)

dit dit

Chuck Adams K5FO CP-60 wpm  
adams@sgi.com

From qrp-request@Think.COM Tue Jan 11 20:28:31 1994  
Date: Tue, 11 Jan 1994 17:32:01 -0800  
From: burdick@interval.com (Wayne Burdick)  
Subject: Scout question

Can anyone tell me what type of connectors the Scout's plug-in band modules use? Also, does the owner's manual give any clue as to how many times the modules can be inserted/removed?

Thanks

Wayne, N6KR

From qrp-request@Think.COM Tue Jan 11 11:26:43 1994  
From: Bob\_Fairbairn-C12509@amail.mot.com  
Date: 11 Jan 94 10:24:20 -0600  
Subject: Software and ham

Software is an interesting beast. In the case of the articles in QST where the authors have chosen to keep their "property" secret. As a software engineer I like to keep control of my creations, but it would be nice too see how things are done, such as the DSP articles.

From qrp-request@Think.COM Mon Jan 10 13:25:40 1994  
From: Scott Wood <swood@vela.acs.oakland.edu>  
Subject: Spare parts  
Date: Mon, 10 Jan 1994 13:25:48 -0500 (EST)

Well, we have a nice junk shop up the road where I got a ton of nice knobs, a bag of assorted screws, some binding posts, wire grommets and even a couple of nice audio amp circuits and mini-speakers.

I will be going to Radio Shack to get a new wad of resistors and capacitors and maybe even a DMM. I have a nice collection of digital IC's (both ttl and cmos) and will be picking up some op amps and mixers from the Active store down the road where I also got a good collection of diodes, xsistors and capacitors.

Now, where can I get a collection of toroid cores, pre-measured chokes and open air/ceramic caps for my junk box?

swood

--

If you receive this signature, please return it to it's rightful owner:  
swood@vela.acs.oakland.edu           swood@argo.acs.oakland.edu  
swood@unix.secs.oakland.edu       swood@terminator.rs.itd.umich.edu

From qrp-request@Think.COM Sat Jan 8 02:40:19 1994  
Date: Fri, 7 Jan 1994 23:40:10 -0800 (PST)  
From: Stephen Lee <slee@u.washington.edu>  
Subject: Re: SRA-1 mixer specs/pinout

I've got the '92 ARRLno handbook and it too lists the frequency range for the SRA-1 as 5 to 500 MHz.

In chapter 30, HF Radio Equipment, Pg. 30-11, Fig. 13, is a diagram of a mixer circuit. The description of the mixer, IC U2, lists the Mini Circuits Lab doubly balanced mixer, type SBL-1. It also lists mixer type SRA-1 as "suitable, as are other similar units from other manufacturers. Well, I had just been reading up on this circuit this evening then I read your message. Thought I could verify those pinouts but now I'm as confused about it as your are. So don't feel alone...

In the event ARRL reads this...I've noticed all the various mixer types in chapter 12. Looks like Plessey, Motorola, and RCA are represented. Why not include the Mini Circuits SRA-1??? All-in-all, it is a very comprehensive collection

On Fri, 7 Jan 1994 ROHRWERK@holonet.net wrote:

```
> Have been bulding the Campbell R2 receiver. I have some Mini-Circuits
> SRA-1 mixers on hand, but I'm uncertain of the detailed specs. My 1988
> ARRL handbook says it has LO/RF range of 5-500 MHz, but my Radiokit
> catalog (reliable source?!) says 0.5-500 MHz. May want to run it on 80
>
>
> Also, the pinout the guy gave me was the same as the SBL-1. Can anyone
> confirm this?
>
> Bottom View: (1=blue mark)
>
>   RF  IF  Gnd  Gnd
>   1   3   5   7
>   +   +   +   +
>       |
>   +   +   +   +
>   2   4   6   8
> Case IF Gnd LO
>
>
> John Seboldt K0JD
>
>
> ---
> * Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly
>
```

From qrp-request@Think.COM Sat Jan 8 10:44:04 1994

Date: Sat, 08 Jan 94 07:43 PST

From: Michael Stein

<OSYSMAS@MVS.OAC.UCLA.EDU>

Subject: Re: SRA-1 mixer specs/pinout

```
> Have been bulding the Campbell R2 receiver. I have some
> Mini-Circuits SRA-1 mixers on hand, but I'm uncertain of the
> detailed specs. My 1988 ARRL handbook says it has LO/RF range
> of 5-500 MHz, but my Radiokit catalog (reliable source?!) says
> 0.5-500 MHz. May want to run it on 80
>
>
> Also, the pinout the guy gave me was the same as the SBL-1. Can
> anyone confirm this?
```

It's very similar to the SBL-1, however it has some differences:

- hermetic seal
- HTRB tested, 5 year guarantee
- it's slightly taller (.400 in vs .310 in)
- the pinout is almost the same, except that the SRA-1 has pin 2

connected to the case (the SBL-1 doesn't have a case connection). Both are run with pin 2 grounded.

- it's more expensive.
- it has a slightly different insertion loss spread (wider, but average is lower 5.11 db vs 5.60 db).
- it has 5 db or so less isolation "typical", "minimum"s are the same.

This is from Mini-Circuits RF/IF designer's Guide (SF 93/94) - a thin booklet.

From qrp-request@Think.COM Sat Jan 8 12:39:39 1994  
Date: Sat, 8 Jan 94 10:47:31 EST  
From: epacyna@auratek.com (Edward Pacyna)  
Subject: Re: SRA-1 mixer specs/pinout

John

From the Mini-Circuits RF/IF signal processing handbook:

The SRA-1 frequency range is: LO/RF port = .5 - 500Mhz  
IF port = DC - 500MHz

It's conversion loss is: 6.5db typical, 8.5db max

The LO drive requirement is 7dbM

Maximum RF port input is 1dbm

The pin-out is the same with the except that pin 2 is also tied to the case.

There are some minor differences in LO-RF port and LO-IF port and case dimensions. The SRA-1 also cost 2X the SBL-1.

73

Ed W1AAZ

From qrp-request@Think.COM Sat Jan 8 11:04:53 1994  
Date: Sat, 08 Jan 1994 11:04:44 -0500 (EST)  
From: JHW%GIZMO@RCC.RTI.ORG  
Subject: SRA-1 vs SBL-1 mixers

I checked the Mini Circuits data sheets in the latest Microwaves and RF magazine (125 pages devoted to Mini Circuits devices), and it looks like the SRA-1 and the SBL-1 are similar. Both operate at the same levels of oscillator drive and rf input. The SRA-1 is rated for 0.5 to 500 Mhz and



the SBL-1 is 1 to 500 Mhz. The pinouts for both devices are the same as are listed in the message below except they say that pins 2,5,6, and 7 are grounds and, on the SRA-1, pin 2 is also case ground (yeah, that would make it seem like pins 2,5,6, and 7 are also case ground. Seems a little confusing but if you ground all four ground pins it shouldn't matter.)

-joe WA4GIR

>Have been bulding the Campbell R2 receiver. I have some Mini-Circuits  
>SRA-1 mixers on hand, but I'm uncertain of the detailed specs. My 1988  
>ARRL handbook says it has LO/RF range of 5-500 MHz, but my Radiokit  
>catalog (reliable source?!) says 0.5-500 MHz. May want to run it on 80  
>

>  
>Also, the pinout the guy gave me was the same as the SBL-1. Can anyone  
>confirm this?

>  
>Bottom View: (1=blue mark)

>  
> RF IF Gnd Gnd  
> 1 3 5 7  
> + + + +  
> |  
> + + + +  
> 2 4 6 8  
> Case IF Gnd LO

>  
>  
>John Seboldt K0JD

From qrp-request@Think.COM Wed Jan 12 22:01:04 1994  
From: randy@cyphyn.radnet.com (Randy)  
Subject: Strange signal heard  
Date: Wed, 12 Jan 1994 21:58:14 -0500 (EST)

Strange thing heard !

Jan 11th '93 around 3-5 AM

A friend and I were juggling parts-to-order, against how much we might eat the next week, and I had the Receiver on, 3699kc.

As our discussion went on, I noticed a carrier that was awfully long for a tune-up, and so I listened a bit more closely.

Then, the very recognisable chimes I.D. of the German station, Deutch-a-vella (that is what it sounds like) came on.

Whoa! What is this??? Can this be?

I switched to A.M. and centered in on freq...they being ON 3700kc... and

listened.

No mistake...being a casual (not a member of any SW clubs) SWL, I recognised the station as being them.

S reading was only 7-9 and very fluttery.

What got me, was to be able to hear --- apparently Germany--- all the way to here ( Connecticut,USA ) on 80 meters.

On 40 mtrs, I'd expect it! ( I'd curse it!! )...but way down on 80?

Then it occurred to both of us: Hey! Just what are they doing down ON 80m anyway???

If anywhere, they might be on 3980kc or 3200kc region....and very faint at that.

So, we pondered over that, while they slowly fluttered to below the noise-of-the-air ( being around S 7).

Being quite occupied with our catalogs and 'how will we eat next week' I didn't note the time...but it was near 4 AM.

--

Randy KA1UNW

If you get a shock while  
servicing your equipment,

"Works for me!"

randy@192.153.4.200

DON'T JUMP!

-Pete Keyes

You might break an expensive tube!

From qrp-request@Think.COM Thu Jan 13 05:15:16 1994

From: jjw@seastar.org (John Welch)

Date: Wed Jan 12 09:19:05 1994

Newsgroups: qrp

Path: jjw

From: jjw@seastar.org (John Welch)

Subject: Re: QST Articles

Reply-To: jjw@seastar.org (John Welch)

Organization: Welch Research.

Date: Wed, 12 Jan 1994 15:19:01 GMT

Message-ID: <CJIvvq.7C7@seastar.org>

Followup-To: qrp

References: <4955@jek>

Lines: 41

As quoted from <4955@jek> by seastar!nshore!usenet.INS.CWRU.Edu!arrl.org!jkearman (Jim Kearman):

> The limited amount of money (ham radio isn't quite as big  
> a market as, say, VCRs) these authors make selling programmed

> parts is fair compensation for building, debugging and  
> WRITING ABOUT a project. I know a ton of hams who are doing  
> really neat stuff. Some of them even complain about what  
> others are publishing in QST, saying it isn't up to date.  
> When you corner these people and send them Author's Guides,  
> though, they disappear into the basement.

Uh, I've seen the Author's Guides, and heard a few horror stories from old-timers. From what I read, the ARRL \*OWNS OUTRIGHT ALL RIGHTS\* to \*ANYTHING\* sent to them. If I send them all the parts to my gizmo, I forfeit all the work I've done. If there's ever any profit to be made from my device, the ARRL gets it all.

Wrong-o there, folks! I have a rather BIG problem about this policy, as I'm almost finished with a complete microcontroller run DDS CW/SSB general-coverage receiver. I would LIKE to publish it, source code included, and still own the copyrights to the code. Note that I have NO problem about anybody else burning ROMS and so forth provided they ask me (it's an ego thing, I like to know how many people are using stuff I've done). I've gotten disgusted with the treatment the authors get from 73 magazine, and I don't like the ARRL's policy either. Been sorely tempted to release everything with a GNU-ish sort of license, requiring no \$\$\$ be charged above cost & shipping while still requiring it carries my name.

BTW, the EPROM controller for the TW-1 DDS rig that was originally supposed to be published in the Nov 93 issue of 73 probably will not be printed till at least April (and yes I did send them source code and .BIN files for the EPROMs). For a 5 page article, schematics, parts list, double-sided PCB artwork, several B/W photos and source code with .BIN files, I will get less than \$150 \*when they publish it\*, whenever that is. Building the first 2 prototypes cost me more than that (grumble grumble). But at least it's improving - I lost a lot more \$\$\$ on the first article from fed-ex charges 1/2 ;-)

--

John Welch, N9JZW

From qrp-request@Think.COM Thu Jan 13 10:28:50 1994  
Subject: Re: Strange signal heard  
Date: Thu, 13 Jan 94 10:26:09 EST  
From: "John F. Woods" <jfw@ksr.com>

> Deutch-a-vella

Having seen two tries at spelling this on QRP recently, for your amusement: Deutsche Welle (German (short)wave).

John, WB7EEL (still haven't quite forgotten all of high school German...)

From qrp-request@Think.COM Wed Jan 12 10:34:50 1994  
From: Tom\_Jennings <jennings@eng115.rochny.uspra.abb.com>  
Subject: Sun spot cycle  
Date: Wed, 12 Jan 94 10:35:10 EST

Hi QRPer's,

This morning on the way to work I had a discussion of the sun spot cycle with another ham on 2 meter. One thing we were not sure of was where we are in the sun spot cycle.

Are approaching the bottom and how long will it be when we hit bottom? Or are we already at bottom?

Thanks for any info.

73

TJ, kv2x

--

-----  
Thomas J. Jennings | Tel: (716) 273 7071  
Development Engineer | Fax: (716) 273 7262  
|  
ABB Process Automation |  
Post Office Box 22685 |  
Rochester, New York 14692-2685 |  
|

-----  
Internet: jennings@jennings.rochny.uspra.abb.com  
-----

From qrp-request@Think.COM Tue Jan 11 23:09:05 1994  
Subject: Ten Tec Scout QRP  
Date: Tue, 11 Jan 1994 20:08:57 -0800  
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Along with the current discussion of how much output the Scout will have when stripped.....

what is the REAL current drain of the receiver? I could look at the published specs, but I don't trust them. Could someone with a Scout tell me the current drain in plain old receive at comfortable listening level? I am hopeful it will be low, else the Scout is not a useful

alternative to my other radios.

Clark  
WA3JPG

From qrp-request@Think.COM Mon Jan 10 22:22:11 1994  
Date: Mon, 10 Jan 1994 21:21:20 -0600  
From: wrfin@prairienet.org (william r finch)  
Subject: Ten-Tec QRP rig

One of the local new hams (age 15) has a Ten-Tec QRP (I think!) rig that he got from a relative, and I told him I would try to find out what the heck it is. It has "RX10" on the front, covers the CW part of 15/20/40/80, push button band select, and an RCA plug for the antenna connection. Is this enough info to ID this little rig? He wants to sell it, and get a fair price, but I can't find this thing in my limited library.

If anyone has some info about this rig, please let me know, and I'll pass it on. TX, and 72/73

--

Bill Finch KF9KI  
Champaign, Illinois

wrfin@prairienet.org bfinch@heartland.bradley.edu

From qrp-request@Think.COM Tue Jan 11 12:25:23 1994  
Date: Tue, 11 Jan 1994 12:22:00 +0000  
From: "William (W.D.) Redfearn" <cmwdr01@nt.com>  
Subject: Ten-Tec Scout - QRP?

In their recent ads, Ten-Tec has said that a QRP version of the Scout is coming. From a phone call to Ten-Tec, I was told that basically they were just going to remove the 50 watt power amplifier module and run directly from the driver stage.

The Scout manual states that the output from the drivers is about 3 watts. So, I thought I would try running directly from the drivers and see what the results were. I removed the covers, unplugged the coax cable between the drivers and the input of the PA module, and unplugged the coax from the output of the PA module and plugged it into the output of the drivers. Then I connected up a wattmeter, dummy load, and power to the Scout and tested in CW mode. I have modules for 160,80,40,30,20,17, and 15 Meters. With the RF pot set for full output, the power output on 40 Meters was about 3 watts. On all of the other bands, the power output was 9-10 watts. The drivers did

not get very warm during the testing, the DC voltage to the rig was 12.5 vdc. The Scout manual said about 3 watts from the driver, so I was surprised to get 10 watts out on every band but 40 Meters.

I wonder if anyone else has tried this with their Scout and what the results were?

If the 10 watts is normal from the drivers, I wonder how Ten-Tec is going to really create a QRP Scout.

73 - Dave.

=====

Dave Redfearn, SR PC LAN Analyst Northern Telecom RTP, NC.  
ph.(919) 992-3925 email: cmwdr01@nt.com qrl? de N4ELM/qrp

All opinions are my own and do not necessarily reflect the views of my employer, co-workers or any other person, real or imaginary.

From qrp-request@Think.COM Wed Jan 12 09:33:23 1994  
Date: Wed, 12 Jan 94 09:33:14 -0500  
From: wb9omc@ecn.purdue.edu (Duane P Mantick)  
Subject: UN-subscribers.....

I seem to have seen a lot of \*this\* lately....

"Could you please take me off the list?"

I don't know if it has to do with the heavy mail volume that this list is generating or not. In my case, I am beginning to get tired of having to clean my mailbox out twice a week or even more frequently. A good 80% of my mail comes from the QRP list these days, in an unceasing torrent.

Now I suppose that is \*good\* in many ways - it suggests an ongoing interest in the QRP sport. :-)

If I may suggest some ideas....

I see a lot of stuff that could be handled by private email, like requests to email information. I don't see a good reason why everybody on the list has to see these requests, even though the actual requested information might be of benefit.

The basic idea, I guess, is not to waste everyone's mailboxes with stuff that isn't likely to interest the whole group. Perhaps with such a reduction in traffic,

fewer people will want to leave.....

Duane  
wb9omc

From qrp-request@Think.COM Wed Jan 12 11:12:40 1994  
Date: Wed, 12 Jan 94 08:13:02 pst  
From: glau@ccmail.com  
Subject: Re: UN-subscribers.....

Isn't there a qrp-request address? I seem to recall when I subscribed to this list, the address for requests was different that what's being used to send this list....maybe this info should be passed along publically periodically.

---

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Gary T. Lau                   | Internet: glau@ccmail.com                     |
| Electronic Messaging and      | Amateur : N6MMM @ N0ARY.#NOCAL.CA.USA.NA      |
| Mobile Computing Division,    | "Don't blame me, I told them I used Microsoft |
| Lotus Development Corporation | Excel but I got hired anyways..."             |

----- Reply Separator -----  
Subject: UN-subscribers.....  
Author: wb9omc@ecn.purdue.edu (Duane P Mantick) at internet-mail  
Date: 1/12/94 9:33 AM

I seem to have seen a lot of \*this\* lately....

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might be of benefit.

The basic idea, I guess, is not to waste everyone's mailboxes with stuff that isn't likely to interest the whole group. Perhaps with such a reduction in traffic, fewer people will want to leave.....

Duane  
wb9omc

From qrp-request@Think.COM Wed Jan 12 12:42:00 1994  
Date: 12 Jan 1994 12:40:05 -0800  
From: "Bob Scott" <Bob\_Scott@cpqm.saic.com>  
Subject: Re: UN-subscribers.....

Reply to: RE>UN-subscribers.....

Actually, I am disappointed when someone asks a question and the answer does not show up on the list. I know that it increases the amount of EMAIL showing up, but one of the reasons I subscribe to this list is to learn from the vast wealth of information that is available. Just my 2 cents worth. 73 Bob AC4QO

From qrp-request@Think.COM Wed Jan 12 13:27:55 1994  
Date: Wed, 12 Jan 1994 13:24:19 -0500 (EST)  
From: "John A. Evans" <jaevans@explorer.clark.net>  
Subject: Re: UN-subscribers.....

> I seem to have seen a lot of \*this\* lately....

>

> "Could you please take me off the list?"

>

> I don't know if it has to do with the heavy mail volume that  
> this list is generating or not. In my case, I am beginning  
> to get tired of having to clean my mailbox out twice a week  
> or even more frequently. A good 80% of my mail comes from the  
> QRP list these days, in an unceasing torrent.

>

Another suggestion - how about the list in digest format? I am a member of other lists that have the digest listserv option. If this option is available, maybe we could reprint instructions on how to get the digest format. If it is not available, maybe we could start it.



-----  
John A. Evans, Capt, USAF  
VHDL/EDA Engineer  
N3Q00 Tech Plus !!!

"My number one goal as a  
runner is to live long enough  
to place in my age group!!!"

jaevans@clark.net

Linux - the OS of choice !!  
-----

Once data encryption is outlawed, only outlaws will have data encryption !!!  
-----

From qrp-request@Think.COM Wed Jan 12 06:37:15 1994  
Subject: Unsubscribe  
Date: Wed, 12 Jan 94 11:33:05 GMT  
From: Jonathan Magee <u9229728@athmail1.causeway.qub.ac.uk>

Could you please take me off the list?  
Thank you  
u9229728@athmail1.causeway.qub.ac.uk

From qrp-request@Think.COM Wed Jan 12 12:06:54 1994  
Date: Wed, 12 Jan 94 09:12:10 PST  
From: bencze@gyro3.stanford.edu (Bill Bencze)  
Subject: Unsubscribe requests...

Just a FYI,

QRP list administrative mail should go to QRP-Request@Think.COM  
(ie suscribe/unsuscribe requests) rather than to the entire  
mailing list, QRP@Think.com. I found this info in the "welcome  
to the list" mailing I got when I suscribed.

-Bill, KD6TOB/AA

From qrp-request@Think.COM Wed Jan 12 12:16:26 1994  
Date: Wed, 12 Jan 94 11:16:18 -0600  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: W5HKA

I got a call from Mike Kilgore last night. He informed me that  
Luke Dodds, W5HKA, had a heart attack and is on life support systems  
in the hospital. He has minimal brain activity and will be taken  
off life support sometime today.

I have known Luke for some time, since we are both active QRPers in

the local area and met every other month for lunch on the first Saturday of even months with other members of the North Texas QRP Group. Luke was the treasurer until last month for the QRP ARCI organization. He will be missed by us all that knew him.

I am posting this so that someone in Europe will pass the word on to the British Group and the Czech OK QRP club members, many of whom were personal friends of Luke.

Luke was born on Jan 2, 1922.

Chuck Adams  
adams@sgi.com

From qrp-request@Think.COM Sun Jan 16 10:46:21 1994  
Date: Sun, 16 Jan 94 09:46:12 -0600  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: W5HKA <sk>

Luke Dodds, W5HKA, passed away Saturday, January 16th at 0700UCT in Grapevine, TX. Luke had a heart attack on Monday Jan 10th.

Luke was Secretary/Treasurer of the QRP ARCI club for a number of years and had just given up the position in Dec. He was also active in the G-QRP and OK QRP clubs in Europe, serving as the US membership coordinator.

I'm sure that he will be missed by many and was a friend to all who met him.

I will post to the group any other notices and information as it becomes available.

Services will be held Monday, Jan 17th in Grapevine at the Faust Funeral Home on Main St.

Chuck Adams  
adams@sgi.com

From qrp-request@Think.COM Tue Jan 11 12:46:48 1994  
Date: Tue, 11 Jan 94 05:36:06 GMT  
From: jkearman@arrl.org (Jim Kearman)  
Subject: W9GR Source Code

I stand corrected. W9GR source code is available.  
Thanks to VE5VA for the info.

73, Jim

From qrp-request@Think.COM Wed Jan 12 20:55:48 1994  
Date: Tue, 11 Jan 1994 22:06:58 EST  
From: wwm@wa8tzg.mi.org (Bill Meahan)  
Subject: Re: W9GR Source Code

If the source code is available, where might one find it?

--

Bill Meahan WA8TZG  
wmeahan@wa8tzg.mi.org  
Hey, this is my OWN computer! I can say what I want!  
cat: a purr bearing mammal

From qrp-request@Think.COM Fri Jan 21 15:42:06 1994  
Date: Fri, 21 Jan 1994 15:42:01 -0500 (EST)  
From: Robert Marlan <rsm@world.std.com>  
Subject: wanted manual for Heath HM-9 wattmeter

Well I have a nice QRP wattmeter (heath HM-9), but  
it needs a little work. If anyone has the manuals and  
the schematics, I would be glad to either buy them, or pay to cover  
any copying and shipping charges!

Thanks a bunch! (help keep me at an honest 5 watts!)

bob KA6NOC  
rsm@world.std.com

From qrp-request@Think.COM Sat Jan 15 13:27:02 1994  
Date: Sat, 15 Jan 1994 13:10:51 EST  
From: wwm@wa8tzg.mi.org (Bill Meahan)  
Subject: What's a NorCAL?

I've seen several references in the last few days to NorCAL rigs. I've  
never heard of them before (but that doesn't mean much :-)) so I'd like  
the usual basic information:

What are the specs?

Who makes them? Kit?

How much do they cost?

Do they cover 30 Meters or just 40?

Where can I get more info?  
Where can I buy one if I decide to?

--

Bill Meahan WA8TZG  
wmeahan@wa8tzg.mi.org  
Hey, this is my OWN computer! I can say what I want!  
cat: a purr bearing mammal

From qrp-request@Think.COM Tue Jan 11 19:25:31 1994  
Date: Tue, 11 Jan 94 16:24:31 PST  
From: dh@deneb.csustan.edu (Doug Hendricks)  
Subject: Where is QQ???

Anybody got their Jan. issue of QRP Quarterly?????  
72, Doug

From qrp-request@Think.COM Tue Jan 11 19:26:50 1994  
Date: Tue, 11 Jan 94 16:25:49 PST  
From: dh@deneb.csustan.edu (Doug Hendricks)  
Subject: Where is QQ???

Has any one seen a copy of the January issue of QRP Quarterly? I know it is still January, but I would expect it to ship by the 1st, not the last. Anxious and waiting. 72, Doug, KI6DS

From qrp-request@Think.COM Wed Jan 12 12:10:10 1994  
Date: Wed, 12 Jan 94 11:09:58 -0600  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
Subject: YL QRPers

Gang,

got a call from Connie Dunn, who writes a monthly column for QST. she is doing an article on YL QRPers. please email name and call of anyone you know that is currently active in qrp work of any kind.

thanks,

dit dit  
Chuck Adams  
adams@sgi.com

From qrp-request@Think.COM Mon Jan 17 01:24:37 1994  
Date: Sun, 16 Jan 94 20:24:27 HST

From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>  
Subject: [burdick@interval.com (Wayne Burdick): NorCal 40: The Second Batch]

Gang,

Since two requests came over the net for the NorCal 40 I thought, as a public service, I'd run the info. Maybe this should be in a FAQ...

Jeff NH6IL (ex WA6QIJ)

\*\*\*\*\*  
-----

Received: by mail.think.com; Tue, 14 Dec 93 17:32:21 -0500  
Return-Path: <burdick@interval.com>  
Received: from Think.COM by mail.think.com; Tue, 14 Dec 93 17:32:14 -0500  
Received: from fred.interval.com by Early-Bird.Think.COM; Tue, 14 Dec 93 17:31:59 EST  
Received: by fred.interval.com; id AA23906; Tue, 14 Dec 93 14:30:23 PST  
Received: by interval.interval.com; id AA06557; Tue, 14 Dec 93 14:30:17 PST  
Message-Id: <9312142230.AA06557@interval.interval.com>  
Date: Tue, 14 Dec 1993 14:33:32 -0800  
To: qrp@Think.COM, adams@chuck.dallas.sgi.com, dh@altair.csustan.edu, mvjf@mvubr.att.com  
From: burdick@interval.com (Wayne Burdick)  
Subject: NorCal 40: The Second Batch  
Cc: ciavarin@mother.millipore.com, wayne@interval.com

The NorCal 40 is back!

Many of you--including NorCal club members--asked about the NorCal 40 AFTER we had already sold all 100 of the kits. Since the response was so positive, we've decided to do another batch of 100.

The first batch of 100 taught us a lot about doing a big club project. Some of us went through two sets of tires and wore out our welcome looking for bargains at surplus stores, which was the only way to keep the cost low enough to offer the kits for \$75. This time, we're going to keep our social lives intact and buy almost all of the parts new, and consequently the price is going up \$14. This is still a bargain when you consider that the NorCal 40 is a complete superhet transceiver kit, with custom case, all controls and connectors, a really clean silk-screened PC board, and a complete assembly manual. (If the NorCal 40 becomes a commercial kit, it will sell for \$100 to \$120 depending on whether or not they use slave/child labor! We can sell it for less because we have a bunch of retired guys doing the kitting who promised thier wives exotic vacations after this is all over.)

If you're interested in a NorCal 40 kit, call Jim Cates at 1-916-487-3580 or write to him at 3241 Eastwood Road, Sacramento, CA 95821. He'll let

you know if there are any left and reserve one for you, at which time you should send him a check (in his name) for \$89 plus \$4 shipping/handling.

If you're not a NorCal Club member, you'll make Doug Hendricks an even happier guy than he usually is by including another \$5 to join up and receive the next issue of the NorCal journal, QRPP. Doug does a great job on QRPP--the last one was around 60 pages! You'll get plenty of QRP tips including ideas for modifying the NorCal 40. (Some club members have modified thier NorCals to put out 5 watts and cover the whole 40-meter CW band, notably Bob Warmke, W6CYX.)

Again, remember to make the check out to Jim Cates, NOT me and NOT NorCal. Note: This is a club project, and all surplus receipts, if any, will go towards NorCal club activities and future projects.

If you missed the original description of the NorCal 40, here's a reprint. Please forward this letter to others who aren't on Internet who might be interested.

72/73,

Wayne Burdick, N6KR

\* \* \*

#### NorCal 40 Transceiver Description

The NorCal 40 is a compact 40-meter CW transceiver optimized for ease of assembly and use. It is particularly well suited to portable, battery-powered operation, with very low receive-mode current drain. To make assembly as easy and trouble-free as possible, all components, including the controls, connectors, and even the case parts are mounted on a single printed circuit board. There is virtually no chassis wiring. Alignment is similarly easy, and can in many cases be done with no test equipment, or with only a separate transceiver that covers the 40-meter CW band.

The receiver is a superhet, providing good sensitivity, selectivity, and freedom from 60-Hz hum pickup. The 4-pole crystal filter offers clear single-signal reception, and a simple differential JFET AGC circuit is used to keep strong signals relatively constant. An RF gain control is provided to attenuate extremely loud signals. The conversion scheme used results in a stable, low-frequency VFO (variable-frequency oscillator), operating at about 2 MHz.

Operating features include RIT (receive incremental tuning), solid-state Transmit-Receive switching, transmit signal monitoring, and variable power output up to about 2 watts.

## Specifications

(Note: Numeric values given are typical.)

### General

|                     |                                                                                |
|---------------------|--------------------------------------------------------------------------------|
| Size:               | 2.2" (H) x 4.6" (W) x 4.5" (D)                                                 |
| Power Requirements: | 10 to 15VDC; reverse-polarity protection                                       |
| Receive:            | 15mA typ.                                                                      |
| Transmit:           | 200mA typ. at 2.0 watts output                                                 |
| Tuning Range:       | Any 35 to 40 kHz portion of 40 meters                                          |
| VFO:                | 2.085MHz at RF = 7.000MHz; 10 to 30 Hz drift<br>from cold start after one hour |

### Transmitter

|                               |                                       |
|-------------------------------|---------------------------------------|
| Output:                       | 500mW to 2.0W, adjustable             |
| Final amp efficiency:         | 75%                                   |
| Load Tolerance:               | brief operation into high SWR or open |
| Transmit offset:              | 500-700 Hz                            |
| T-R (transmit-receive) delay: | 200 milliseconds                      |

### Receiver

|                         |                                        |
|-------------------------|----------------------------------------|
| Sensitivity:            | Better than 0.5uV for 10dB S+N/N       |
| Selectivity:            | 400Hz @ -6dB, 1.5kHz @ -30dB           |
| I.F.:                   | 4.915MHz, 4-pole Cohn crystal filter   |
| R.I.T. Range:           | +/- 2kHz at center of VFO tuning range |
| Audio output impedance: | 8 to 320 (headphones only)             |

### Quirks and limitations:

- there isn't enough AF output to drive a speaker--just headphones;
- the AGC range is limited (JFETs go nonlinear at some point) and you have to choose one of 3 supplied resistors during alignment;
- as with all NE602-based receiver designs, you *will* need the RF gain control once in a while;
- the VFO tuning range is only about 40 kHz using the varactor diode

(presenting one of many opportunities for modification);

- there is a small "birdie" at 7.023 MHz can be easily subdued with a series LC circuit on the back of the board, as explained in the manual (parts supplied);
- there is no I.F. amp--not really needed on 40 meters--so modifying the rig for 20 meters or above isn't a good idea. 30 meters should work fine; replace all 6 of the 4.915MHz crystals in the rig with 8.000MHz crystals. 80-meter mod is even easier since you can use the same crystals.

The rig was designed by Wayne Burdick, N6KR. Please send mail to [wayne@interval.com](mailto:wayne@interval.com) for design details.